C

CAIT

► Climate Analysis Indicators Tool (CAIT)

Calgary, Sustainable

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Definition

Sustainable Calgary (SC) is a citizens' organization founded in 1996. Between 1996 and 1999, over 2,000 Calgarians selected 36 social, ecological, and economic indicators of the well-being, quality of life, and sustainability of Calgary. To date, SC has produced four State of Our City reports (1998, 2001, 2004, 2011).

Description

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SC is guided by five principles. A sustainable community maintains or enhances its ecological integrity; promotes social equity; provides the opportunity for meaningful work and livelihood for all citizens; encourages democratic participation of all citizens; and acts responsibly in its relations with all other communities wherever they may be (Keough, 2005).

A key element of SC's public process has been the invitation for people to participate as citizens. John Ralston Saul has written extensively on the importance of acting as citizens in what he describes as a very corporate world, where individual action, corporate allegiance, or identity group is the norm (Ralston Saul, 1999).

Important findings to emerge from an analysis of the indicators are the unsustainable rates of resource consumption demanded by the growth economy, the built form of the city, and current lifestyles; the growing economic and social marginalization faced by vulnerable groups; and the realization that solutions to these twin dilemmas are synergistic (Keough, 2011).

What has made SCs work effective is a determination to involve as many people as possible through participatory methodologies including participatory action research, participatory appraisal, and popular education and popular theater techniques (Arnold, Burke, & James, 1991).

In 2004, a Sustainable Calgary Indicators Project (SCIP) outcomes research initiative was undertaken. In-depth interviews were conducted with 36 of the approximately 1,000 people

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who had taken part in at least one project workshop. The research answered three questions: "Who got involved, how and why?," "What personal outcomes were realized?," and "What community outcomes were realized?" (Keough, 2005).

Participants got involved in SCIP out of curiosity about the project, the desire to learn, the desire to contribute, the belief that the project could make a difference, and out of a sense of pride in where they live. SCIP introduced participants to the idea of the social dimension of sustainability as an integral part of a more holistic and grounded understanding of sustainability. SCIP was an occasion for significant personal growth for those who participated; was judged to have contributed to or reinforced evolving attitudes and behaviors; and served to affirm and reinforce an existing commitment to advocacy. Professional and personal skill development and career path development were among the other personal benefits identified.

Perhaps the most significant outcome of the SCIP was its promotion of participatory democracy – interviewees felt strongly that the initiative has demonstrated the energy, creativity, sophistication, and effectiveness of citizen action. The indicators project has catalyzed new community research, most notably a sense of community survey tool and a valuing cultural diversity indicator.

SCIP achieved a significant influence on policy. Effects were identified in three areas of policy design within municipal government: policy actors (e.g., city planners), structures (e.g., city council), and instruments (triple bottom line reporting). SCIP created an enabling environment for sustainability and provided legitimacy to a sustainability discourse in the city and to the creation, enhancement, and strengthening of an informal sustainability network that spanned local government, the not-for-profit sector, and average citizens.

The next step in SC's evolution was from sustainability reporting to policy design. The Citizens' Agenda resulted from a deliberative policy-making process engaging over 1,000 citizens (Keough, Nabavi, & Loomis, 2006). Twelve priority policies that would have the largest impact on Calgary's sustainability were documented in the Agenda.

Finally, SCIP has been a catalyst to the creation of a citizen-based political advocacy "un-organization" called CivicCamp. CivicCamp mobilizes citizens to intervene in and drive policy-making, planning processes, and public debate on issues of concern for the sustainability of Calgary (CivicCamp, 2011).

Cross-References

- ▶ Civic Engagement
- ▶ Sustainable Communities Movement
- ▶ Sustainable Seattle

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Calibrated Development Index

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Synonyms

CDI

Definition

The *Calibrated Development Index (CDI)* for a nation, state, province, or other polity equals $nE^5GH^{0.25}$, where E is the life expectancy at birth, G is the gross national product per person, and H is the educational life expectancy from birth (Lind, 2010). When the purpose is international comparison, G is expressed in an international currency such as dollars adjusted for purchasing power. If the purpose is diachronic comparison for a country, G is expressed in the national currency, optionally corrected for inflation. n is an optional positive normalizing constant suitable for the context.

Description

The CDI is a development of the Human Development Index (HDI) (United Nations Development Programme, 2010) and the Life Quality Index (LQI) (Pandey, Nathwani, & Lind, 2006). The variables of the CDI, like those of the HDI, are measures of three fundamental and indispensable "basic dimensions of human development" – longevity, production, and culture. But, like the LQI, the Calibrated Development Index corrects the most serious shortcomings of the Human Development Index: While the HDI employs up to one dozen unjustified parameters to the variables E, G, H, and adult literacy and so has been widely dismissed as an arbitrary transformation of the data, the CDI parameters are all calibrated to specific criteria. Unlike the HDI, the CDI is not constrained to the unit interval, accepting that the process of human development is not complete for any country.

The Life Quality Index (LQI) introduced the idea that the variables E and G are not additive but properly act as factors of the object index – LQIInsert Space=Insert SpaceE^aG^b rather than aEInsert Space+Insert SpacebG, where a and b are parameters – and furthermore, that the parameters should be calibrated to reflect peoples' revealed preferences (Pandey et al., 2006). The parameters were derived by utility theory and welfare economics from measurable, accurate statistics reflecting peoples' choice of how much work is worth (Nathwani, Lind, & Pandey, 2009; Pandey & Nathwani, 2007; Pandey et al., 2006). A Cobb-Douglas production function was used to express how economic output G depends on the amount of time devoted to work. This empirically verified LQI approach was adopted by the Calibrated Development Index to define the lifetime expected utility of consumption. The exponent 5 of the life expectancy was derived from statistical time series for 21 developed countries over the period 1976–2005 (Nathwani et al., 2009).

Persons presumably decide to end their education to start working when the marginal value of expected lifetime earnings and cultural benefits equals that of education. For the high-income OECD countries, the observed breakeven coefficient of a relative change in H ranges from 0.18 to 0.32 with a mid-range of 0.25. Thus, the resultant weightings in the CDI (5, 1, 0.25), differ significantly from the simple equal-weights assumptions of the HDI.

Reliability

The CDI is very reliable, resting on the well-defined statistics of its "parent" indices HDI and LQI. The most uncertain component statistic is population, which may be in error by several percent. Consequently, only the first two digits in the CDI can be considered significant.

Validity

The validity of the Calibrated Development Index was tested using data for 51 countries from the World Values Surveys 2006 and compared with the HDI. The countries ranged from Norway (HDI rank 2) to Burkina Faso (HDI rank 176). Two dimensions emerging in the data are "Individual" and "Societal" development. Considering "Human development" as the sum of the two, yielded the correlation statistic of 86 % for the CDI (and 83 % for the HDI).

Discussion

The CDI can be used to rank nations – but the usefulness of such an exercise is limited: In view of data uncertainty, many developed

countries have practically the same rank. If higher precision is used, rank orders can change much from year to year, as also the HDI has shown.

Like the LQI but unlike the HDI, the Calibrated Development Index can be used to assess the efficiency of social policy expected to affect life expectancy. It is possible to compare alternatives in, for example, life-risk intervention (Lind, 2010).

Cross-References

- ▶ Human Development Index
- ▶ Life Quality Index

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Cambridge Social Interaction and Stratification Scale (CAMSIS)

- ▶ Social Inequalities

Campaigns and Activists

- ▶ Social Activism

Campbell, Angus

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Birth, Education, Work History, and Main Contributions

Angus Campbell (1910–1980) was a pioneer in studies of ▶ social indicators of well-being or ▶ quality of life research. He was born in Indiana, raised in Portland, Oregon, and earned his B.A. and M.A. from the University of Oregon in 1931 and 1932, respectively. In 1936, he completed his Ph.D. at Stanford University under E.R. Hilgard. In 1946, Rensis Likert and some colleagues convinced the University of Michigan to establish the ▶ Institute for Social Research. For the first 25 years of ISR's existence, Likert was its Director, and Campbell was Director of its Survey Research Center. When Likert retired in 1970, Campbell replaced him.

In 1967, the Survey Research Center was asked by the National Commission on Civil Disorders to undertake a study of race problems in 15 major cities, some of which had experienced severe disturbances in the previous summer. This led to publication with H. Schuman of "Racial Attitudes in Fifteen American Cities" in *Supplemental Studies for the National Advisory Commission on Civil Disorders* (1968). Three years later, Campbell published *White Attitudes Toward Black People* (1971). Both of these studies were groundbreaking for understanding race relations in the United States.

The two most important studies for quality of life research by Campbell followed his 1971 publication on white attitudes. With Philip Converse, Campbell edited a collection of papers focused on ▶ subjective indicators called *The Human Meaning of Social Change* (1972). While at Stanford, Campbell became a close friend of Kurt Lewin, who developed

► aspiration theory. This theory later became central to the explanatory model used in his *magnum opus* written with Philip E. Converse and Willard L. Rodgers, *The Quality of American Life: Perceptions, Evaluations and Satisfactions* (1976). One way to measure the impact of these volumes on quality of life research is to note that one or the other volume was cited in 11 of the 17 (65 %) reprinted citation classics from *Social Indicators Research* (Michalos, 2005).

Among other achievements, Campbell received the Distinguished Achievement Award from the American Association for Public Opinion Research (1962), an honorary Doctor of Letters from the University of Strathclyde, Scotland (1970), the Lazarsfeld Award from the Council for Applied Social Research (1977), the Lasswell Award from the International Society of Political Psychology (1980) and was elected as a member of the US National Academy of Sciences (1980).

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Canada, Quality of Life

► Canadian Index of Well-Being

Canada: Social Cohesion

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Definition

The concept of social cohesion has two basic components. One refers to the psychological identification of members within a collectivity, called *ideational* component. The other refers to the observed relationships among members, called *relational* component. Empirical research usually separates these two components, depending on the focus of study. Studies that restrict the concept to the ideational component inquire about individuals' feelings, such as ► sense of belonging. In contrast, studies that focus on the relational component examine the relationships between members of different groups.

A definition adopted by Canadian social scientists (see Rosell et al., 1995:78) sees social cohesion as "building shared values and communities of interpretation, reducing disparities in wealth and income, and generally enabling people to have a sense that they are engaged in a common enterprise, facing shared challenges and that they are members of the same ► community." [For an alternative definition of social cohesion based on the lexicographic definition of the expression, see Chan, To, and Chan (2006)].

Description

Introduction

More than a century ago, Durkheim (1893, p. 64), to whom we owe the concept of social cohesion or social solidarity, stated that it is "completely a moral phenomenon which, taken by itself, does not lend itself to exact observation and indeed to measurement. To proceed to this classification and this comparison, we must substitute for this

internal fact which escapes us an external index which symbolizes it and study the former in the light of the latter." A century of advances in empirical observation and analytical techniques have not overcome the problem. There is still no universally recognized definition of social cohesion, because it is a multi-faceted notion covering different kinds of social phenomena.

Multidimensional Aspect of Social Cohesion

Based on the above definition of social cohesion, Canadian social scientists and researchers developed specific group properties to capture the concept of social cohesion and classified them under six *dimensions*: recognition, belonging, legitimacy, participation, inclusion, and ▶ equality (see Jensen, 1998; Bernard, 1999). These six dimensions can in turn be neatly grouped under three *domains*: social, political, and economic, as exhibited in Table 1.

The *inclusion/exclusion* dimension under the Economic domain points to market forces and addresses the questions of who has opportunities to participate or who is marginalized or excluded from participation in the economy. The dimension of *equality/inequality* calls for reducing inequality of conditions. The *legitimacy/illegitimacy* dimension under the Political domain refers to how adequately the institutions (such as the government, political parties, and unions) represent the people. *Participation/passivity* under the same domain relates to people's involvement in governance or in politics. The *recognition/rejection* dimension under the Social domain recognizes the virtue of pluralism, while *belonging/isolation* relates to shared values or sense of being part of a community. While these six dimensions are theoretically interesting and meaningful, the survey data available to researchers may not provide all the information needed as indicators of these six dimensions.

Multilevel Aspect of Social Cohesion

The concept of social cohesion is not only multidimensional but also multilevel. Measures of cohesion for the nation as a whole may be interesting and useful especially for cross-national comparisons. However, it would be more appropriate to measure cohesion at the "community" level, as communities are where people live, share, and engage in day-to-day activities. But "community" is a social construct that is difficult to identify based on geographic maps. People in the same geographic area may have different "communities" that are meaningful to them, or communities can span over, and slice across, two or three geographic areas. One way of capturing "communities" in a meaningful way is to consider the smallest possible geographic areas. For example, using the census enumeration areas (EA) is one possibility, although it has no intrinsic meaning besides that of units that are convenient for enumerators. However, using the EAs may lead to practical problems such as problems of small or no number of cases in many EAs. Higher geographic levels can be tried, such as census tracts (CTs) or census metropolitan areas (CMAs). These levels, however, may not represent the "true community" of the residents, especially since their sizes can vary greatly.

Canada: Social Cohesion, Table 1 Domains and dimensions of social cohesion

Domains of social cohesion	Dimensions of social cohesion	
Economic	Inclusion/ exclusion	Equality/ inequality
Political	Legitimacy/ illegitimacy	Participation/ passivity
Sociocultural	Recognition/ rejection	Belonging/ isolation

Source: Bernard, Paul, 1999, p.20

Specific Indicators of Social Cohesion in Canada

The indicators, of which some are "objective" such as income and voting in elections and some others are "subjective" such as sense of belonging and perception of discrimination, may be collected from surveys or censuses, preferably for different geographic levels. See Jackson et al. (2000) for a list of indicators used in Canadian studies. Due to space limitations, only one or two important indicators are highlighted in this section, by way of giving

a quick evaluation of the state of social cohesion in Canada at the national level. The supporting data are mostly taken from the latest statistical tables and research highlights available on Statistics Canada's web page (see http://www.statcan.gc.ca/start-debut-eng.html).

Economic Domain

Employment Rate

The employment (or ▶ unemployment) rate is a key indicator of people's participation and involvement in the economic and material ▶ welfare of a nation. When measured repeatedly over time, it can indicate the major socioeconomic changes over time. It is well known that entry into labor force has been delayed over generations as more young adults remain longer in school. In addition, young adults are finding it more and more difficult to get stable jobs or jobs with decent pay and benefits, thus forcing them to move in and out of contingent jobs and dependence on social welfare. As of February 2012, the unemployment rate was 7.4 % and the employment rate was 61.6 % for the Canadian labor force, while the corresponding rates were 14.7 % and 54.1 % for those aged 15–24 years. The employment rates of men and women have gradually converged over the years, indicating the level of inclusion and participation of women in paid work to the extent that more women than men are employed in recent years and more women than men are becoming breadwinners of their families (Mundy, 2012). The unemployment and employment rates for Canadian men and women aged 25 years and over, again as of February 2012, were 6.3 % and 68 %, and 5.9 % and 58.2 %, respectively.

Income Inequality or Polarization

As a by-product of employment opportunities available to members of a society, a measure of income inequality is highly relevant to social cohesion. It is a major indicator of limited opportunities available to some sectors of the population and of conspicuous differences in opportunities and life chances available to different socioeconomic groups in a society. Income inequality or income polarization, measured as the ratio of the average family (after-tax) income of those in the top 10 % of income to those in the bottom 10 % of income, would indicate the gap between the least and most affluent members of a society. In Canada, this measure fell from 7.46 in 1979 to 6.58 in 1989 but rose during the 1990s to reach 8.85 in 2004. [Other indicators such as Gini Index for more recent years show only further increase in inequality – see, e.g., Conference Board of Canada at http://www.conferenceboard.ca/Files/hcp/pdfs/hot-topics/canInequality.pdf.] This increase is due not only to the reduction in the generous government transfer programs over time, which itself reflects a weakening redistributive role of the Canadian state, but also to the rising inequality in market (pre-tax, pre-transfer) income. The average income in the bottom 10 % fell by 8 % over this period but rose by 24 % in the top 10 %. As in most developed nations, income inequality in Canada is currently driven more by unemployment and/or "precarious" employment without adequate security for the future and a decline in the relative employment prospects and earnings of younger workers. Very recent events in the globalized world such as the Occupy Movement suggest heightened consciousness regarding this divisive non-cohesive feature in various societies.

Social Domain

Crime Rate

From the social and collective welfare perspective, important indicators are mostly based on the notions of shared ▶ values, ▶ trust and reciprocity, and sense of belonging. A sense of loss of these desirable qualities can occur in many ways at various levels like families, ▶ neighborhoods, and communities, more seriously through criminal acts such as homicides and acts of ▶ violence including kidnapping, sexual abuse, drug trafficking, and burglaries. In general, the crime rates have been falling in Canada during the last three decades. The national crime rate, which measures the overall volume of crime, has been falling steadily for the past 20 years since 1973 and is now at its lowest level (6,145 incidents per 100,000 people in 2010, with a 5 % decline from 2009). The Crime Severity Index,

which measures the severity of crime, fell to 82.7 % in 2010 with a 6 % decline from 2009. However, while decreases were observed for crimes such as homicide, attempted murder, serious assaults, and robbery, increases were evident in some specific crimes such as sexual assault, use/discharge of a firearm, criminal harassment, child pornography, and drug offences. Similarly, hate crimes motivated by race, ethnicity, religion, or sexual orientation increased by 42 % in 2009 compared to the previous year.

Trust in People and Confidence in Institutions

Social indicators such as trust in people, confidence in institutions of public health care, public ► education, ► justice, and parliament give a mixed picture of social cohesion in Canada. The majority (over 50 %) of Canadians report that most people can be trusted and there has been a gradual increase over time in the percent reporting so. Noteworthy differences by provinces seem to exist; while only 35 % of Quebecers express trust in other people, over 60 % of people in the Atlantic Provinces do so. As for confidence in institutions, survey data show that a great majority of Canadians (over 80 %) have a lot of confidence in the police and local business systems, a good majority (about 65 %) have a lot of confidence in the education and health care systems, a smaller proportion (57 %) in the legal and justice systems, but much less in the Parliament system (around 35 %). An interesting observation is that although the Quebecers are less likely to express trust in other individuals, they are more likely to express confidence in institutions.

Sense of Belonging

Sense of belonging or feelings of attachment to community, town, province, or Canada as a whole reveal again a community of shared values. Overall, a great majority of Canadians – including Quebec residents who speak French at home – express a strong sense of belonging to Canada (85 %) and to their province (78 %) and local community (68 %). "Very strong" feelings of belonging are more prevalent among older than younger individuals. A vast majority (84 %) of immigrants also express a strong sense of belonging. Feelings of belonging to local community are closely associated with length of residence in the area as well as rural/urban character; those in rural areas and smaller towns are more likely than those in large cities to report strong sense of community belonging.

Caring and Giving

Caring and giving are cornerstones of a cohesive society. Canadians are known to exhibit caring and giving in whatever capacity they can. A vast majority of Canadians, irrespective of their age, sex, or region of residence, donate their time and money to a variety of causes promoted by charitable and nonprofit organizations. According to the 2010 National Survey of Giving, ► Volunteering, and Participating, around 80 % of the population aged 15 and over made a financial donation, for a total amount of $10.6 billion, with an average $446. While more donors are from the Atlantic Provinces, higher amounts of donations are from the western provinces. Similarly, 47 % of Canadians aged 15 and over volunteered their time through groups or organizations, to a total of nearly 2.1 billion hours in 2010, with an average of 156 h. Those who donate the most are more likely to be older, to have higher household income and formal education, or to attend weekly religious services. Those who volunteer the most are more likely to be older, widowed, with no children at home, no longer in the workforce, and to attend weekly religious services.

Political Domain

Voting in Elections

Voting in federal, provincial, or municipal elections is an indicator of people's willingness to participate in civic activity. It is a clear sign of the health of the democratic process. Although 84 % of Canadians feel that voting is a very important civic responsibility, the actual percentages voting in federal, provincial, and municipal elections have been falling much below expectations in recent years, especially among young adults. In federal elections, voter turnout has been decreasing since the late 1980s from 75 %

to 61 % in 2000 to 59 % in the latest election in 2011. The most common responses for not having voted in the 2011 election were "not interested in voting" (28 %) and "too busy" (23 %). In provincial and local elections, voter turnout is generally lower than in federal elections and varies greatly between major urban centers. It is likely that Canada is experiencing what other developed nations are also experiencing, namely, a shift away from the traditional form of political engagement such as voting to more unconventional forms such as participating in petitions, boycotts, and public demonstrations. This shift varies across age groups, with young adults more likely to adopt this shift.

Indicators such as the ones illustrated above cannot individually or collectively speak to the state of social cohesion, because the concept of social cohesion is more than the sum of its individual parts. We need to address the multidimensional and, if possible, the multilevel nature of the concept. We shall briefly illustrate this in the next section.

Multidimensional and Multilevel Aspects of Social Cohesion in Canada

In statistical terminology, social cohesion is a "latent" measure; it cannot be observed directly but has to be "derived" from a set of relevant indicators. Assuming that relevant indicators are available through a national survey that covers all segments of society, the variables need to be factor analyzed through exploratory and confirmatory methods to identify the "latent measures" of the three domains of social cohesion as well as an overall measure or index of social cohesion. Readers interested in the methodological procedures can consult the paper by the author Rajulton, Ravanera, and Beaujot (2007).

From the several indicators available from the 2000 Canadian National Survey of Giving, Volunteering, and Participating (NSGVP), the following were selected for deriving the latent measures of the three domains and the overall index, all at the geographic level of the Census Metropolitan Areas (CMAs): proportions voting in the federal, provincial, and municipal elections (capturing the *legitimacy* aspect of the political dimension); proportions volunteering and participating in civic organizations (capturing the *participation* aspect of the political dimension); proportions employed; proportions holding tenured jobs (capturing the *inclusion* aspect of the economic dimension); proportions falling below low-income cutoff (capturing the *equality* aspect of the economic dimension); proportions socializing weekly with family, relatives, friends, and sports/recreation clubs (capturing the *belonging* aspect of the social dimension); and a heterogeneity measure of major ethnic groups (capturing the *recognition* aspect of the social dimension). A few relevant findings are given here.

Separate scores on the three domains confirm some of the commonly known impressions about the different regions of the country. The CMAs in the Atlantic Provinces are generally small and are seen as places where communities are closely knit. This is revealed in their prominence in the social domain, but their economy is not as good as in Ontario, Alberta, or British Columbia. And, the long-standing issue of separatist movement in Quebec may have politicized its residents more than in other parts of Canada. It is no surprise, then, that many cities in Quebec score high in the political domain. The CMAs in Ontario and British Columbia dominate in the Economic domain. Major cities like Toronto, Vancouver, and Montreal have a strong economy and therefore have high scores in the Economic domain. Thus, the domain scores are strikingly clustered in the provinces, which brings to the fore the significant differences that exist between the provinces – economically, socially, and politically.

The domain scores also reveal another interesting point: no CMA scores were high in all three domains. This suggests that CMAs differ in their base on which social cohesion is (and can be) built. When weak in one domain, they compensate by being strong in another. This "compensation effect" results in CMAs not greatly polarized. The resulting balance among the CMAs possibly contributes to the social cohesion of the country as a whole.

As for the overall index of social cohesion derived from the separate indices on domains,

one would expect those CMAs with high scores in any of the domains to have higher overall index scores as well. That, however, is a rare phenomenon. The CMAs which have "average" scores in all domains move up in the overall index, depending on the weights associated with each domain. Thus, the end result of the overall scoring is such that the CMAs with the highest overall scores are generally moderate-size CMAs that hold a moderate to high score in at least two domains. What this means is that a high level of social cohesion requires a balancing of the three domains. The overall measure also reveals that the highest ranking CMAs are well scattered in different parts of Canada – Hamilton, St. Catharines-Niagara, and Sudbury in Ontario; Red Deer, Moose Jaw, Edmonton, and Victoria in the West; and Charlottetown, Fredericton, and Saint John in the Atlantic Provinces. This makes it clear that no one region in Canada can claim to be more conducive to social cohesion than any other.

Conclusion

Immigration trends during the last few decades have resulted in ethnic diversity in many developed nations including Canada, and serious concerns have arisen regarding its impact on social cohesion. Governments have followed various agendas for maintaining social cohesion through programs like multiculturalism, social integration, assimilation, and/or inclusion, yet these programs do not seem to have resulted in anticipated results as seen through demonstrations and violent confrontations in some European nations. But there is little evidence of such a breakdown in social cohesion in Canada. Picot (2008) attributes a number of possible reasons for this phenomenon, including Canada's historic roots and the *Canadian Charter of Rights and Freedoms*, the typically high education level of Canadian immigrants themselves, general acceptance of the contributions of immigrants to the demographic and economic health of the nation, and active political and civic participation of immigrants and visible minorities.

Overall, the major national and subnational indicators under the three domains of social cohesion speak favorably well to Canada's good standing in its state of social cohesion on the international stage. Some indicators show "positive growth" towards a more cohesive society, and some others show deterioration over time. Given the more complex realities arising from today's globalized world, one can never exaggerate the role of sound social, not merely economic, policies that focus on sustaining a cohesive society into the future.

Cross-References

- ▶ Social Exclusion
- ▶ Social Inclusion
- ▶ Social Integration
- ▶ Social Interaction

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Canadian Index of Well-Being

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Synonyms

Canada, quality of life; Canadian quality of life; Measuring quality of life in Canada; Measuring well-being in Canada; Well-being in Canada; Well-being index for Canada

Definition

The Canadian Index of Well-being (CIW) is a ▶ composite index of eight interconnected domains that measures trends in the well-being of Canadians over time. Well-being is conceptualized as "The presence of the highest possible ▶ quality of life in its full breadth of expression focused on but not necessarily exclusive to: good living standards, robust ▶ health, a sustainable environment, vital communities, an educated populace, balanced time use, high levels of democratic participation, and access to and participation in ▶ leisure and culture" (CIW, 2012). The CIW provides a companion measure of societal progress to gross domestic product (GDP), which is solely concerned with economic productivity (Statistics Canada, 2008; Stiglitz, Sen, & Fitoussi, 2009).

Description

The Canadian Index of Well-being is part of a global movement recognizing the importance of domains of life that contribute to well-being beyond economic activity. By monitoring well-being through a series of objective and ▶ subjective indicators, both policy makers and the general public can advocate for change to promote the highest level of well-being for all citizens. The CIW follows a ▶ social indicators of health perspective (Raphael, 2009), with the premise that multiple, interrelated social and environmental factors contribute to the well-being of Canadians. This perspective is shared by the Public Health Agency of Canada (PHAC, 2012).

Beyond providing a companion measure to GDP, one of the primary goals of the CIW is to identify interconnections among the multiple factors influencing the well-being of Canadians. The intent is to extend the understanding of well-being as a multidimensional construct, with the knowledge that policy decisions and programs can affect experiences, perceptions, and opportunities beyond the specific area for which they were intended. For example, a healthier population decreases the need for health-care treatment, which, in turn, means more resources are available to fund education. Similarly, a sustainable environment can help to protect exports and jobs, influence ▶ public health, and create opportunities for leisure and ▶ recreation. The challenge is to effectively use the CIW to influence policies and legislation in order to improve the well-being of all Canadians.

History and Development

The CIW is a citizen-driven initiative, rather than being directed by government—as is the more common practice in other countries (e.g., the UK, ▶ Italy, France, ▶ Germany, Bhutan). Consequently, the CIW is guided by essential Canadian values and is nonpartisan. This also means that in order for the CIW to be considered a credible, reliable, and valid measure, both the measures upon which it depends and the process through which it was developed had to be rigorous and constructed on the foundation of solid empirical evidence and research (Hagerty et al., 2001).

The impetus for the Canadian Index of Well-being began with the Atkinson Charitable Foundation (ACF) in Toronto, Ontario. In 1999, the ACF organized a workshop that brought together experts in ▶ social indicators research to consider the question, "What would it take to create a tool to measure the well-being of Canadians?" The consensus was that such an

endeavor would require a management structure, adequate financial support for the length of the project, and importantly a base of rigorous research in order to ensure validity and credibility. Following these recommendations, the ACF instigated a comprehensive process for developing what would eventually become the Canadian Index of Well-being.

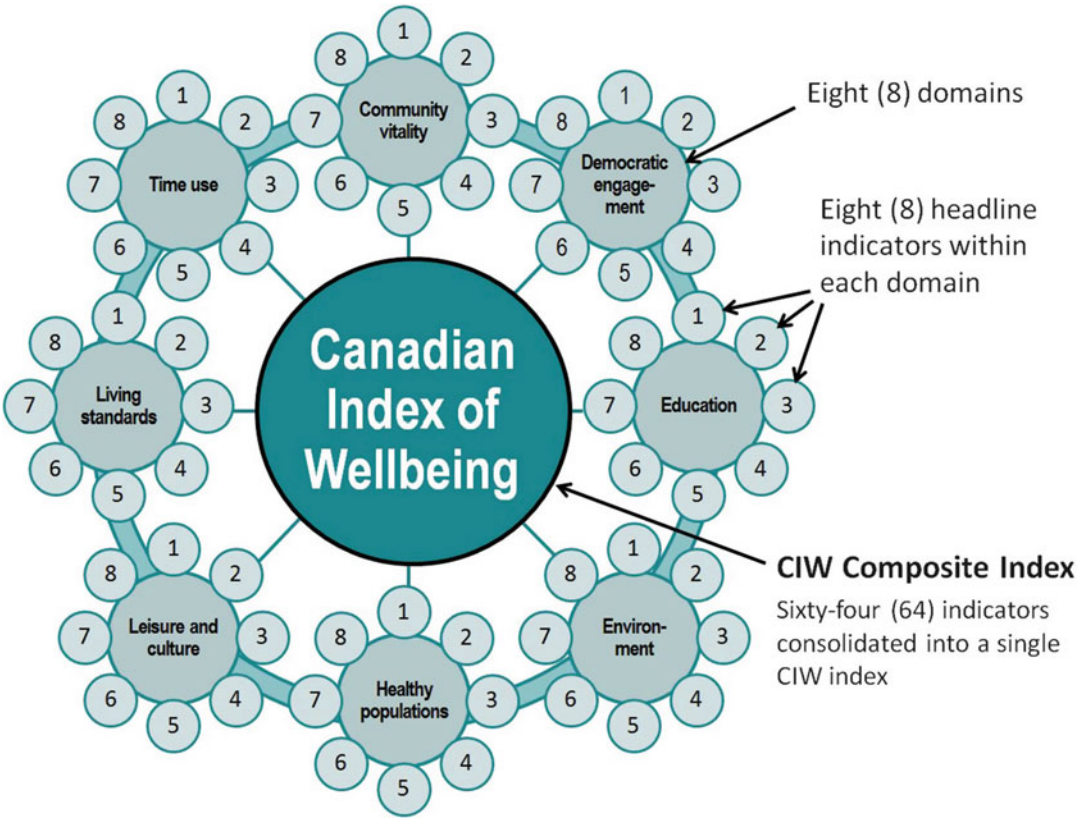
The following year, the Atkinson Charitable Foundation began the process of developing the CIW. This process included expert advice, broad public consultations, contributions of research teams from across Canada, and discussions with practitioners, government officials, and potential users. There were three overlapping stages between 2001 and 2010 in the evolution of the CIW: (1) the identification of the key domains associated with Canadians' quality of life, (2) the identification of indicators directly associated with well-being in each of the domains and compilation of relevant data, and (3) the consolidation of a ▶ composite index for each domain and for the CIW composite index, bringing together all of the domains and their specific indicators.

Several concurrent strategies for gathering information from Canadians were used to identify the domains of well-being that comprise the CIW. In 2000, in conjunction with the ▶ Canadian Policy Research Network (CPRN), public consultations were undertaken across Canada involving almost 350 participants in 40 discussion groups. During this process, Canadians described those aspects of life that they felt were directly related to their well-being and contributed most to their ▶ quality of life. This strategy resulted in a series of reports by the CPRN that began to identify prevalent thematic areas that Canadians believed were most influential (CPRN, 2001a). In addition, the reports outlined some of the specific areas and indicators of quality of life that were suggested by discussion group participants (CPRN, 2001b).

Next, in 2002 and in 2004, the ACF organized a roundtable discussion and workshop and invited more than 60 experts on social indicators and well-being. Participants' specializations included ▶ community development, economics, education, environmental studies, health promotion, political science, and recreation, arts, and culture. Practitioners and government officials – including those who were potential users of the index – also participated in these discussions and collectively began reviewing and assessing all of the information in order to narrow the focus to those domains regarded by Canadians as most essential to overall quality of life. The participants also helped to establish what would become the Canadian Research Advisory Group (CRAG), the members of which served as advisors on the validity and credibility of the strategy and the process to determine the final domains and indicators of the CIW. CRAG continues to serve in an ongoing capacity to provide advice on trends and developments within each domain, review regular updates of the CIW, and promote research and ▶ knowledge exchange to ensure that the CIW continues to reflect Canadians' perceptions and experiences of well-being.

In 2006, the ACF contracted EKOS Research Associates to conduct a further series of 19 ▶ focus groups in 14 communities across Canada. Approximately 250 individuals participated, representing diverse populations including business leaders, government officials, Aboriginal peoples, members of the media, and representatives of a diverse range of nongovernmental organizations (NGOs). Subsequent to these focus groups, at a workshop hosted by the ACF, selected members of CRAG gave presentations about emerging domains and indicators of well-being to a group of representatives from various NGOs and levels of government. Following the advice of the participants, additional refinements to the CIW conceptual framework and to the approach for consolidating the CIW composite measure were undertaken. The ACF organized two more rounds of consultations in 2007 and 2008. The discussions allowed participants to be updated on the progress toward finalizing the CIW, provide feedback on the conceptual framework, and initiate local networks of advocates who would eventually communicate the CIW to the broader public.

Based on all of the consultations and discussions and on the various reports submitted for the



Canadian Index of Well-Being, Fig. 1 Canadian Index of Well-being conceptual framework

domains, along with an ongoing environmental scan that identified, monitored, and considered other initiatives undertaken internationally, in 2008 the ACF selected the final eight domains that would comprise the CIW's conceptual framework (see Fig. 1). From 2009 to the spring of 2011, the research teams for the eight selected domains completed their final reports. The domain reports provided comprehensive reviews of the literature supporting the direct contribution of each domain to well-being and recommended indicators to be considered for inclusion in the composite index of the domain, as well as the composite index that would eventually define the CIW.

The thorough, rigorous, and lengthy consultative process for identifying the eight domains comprising the CIW confirmed the validity and credibility of the final conceptual framework. It is informed by and reflects the contributions of the general public in Canada, as well as the advice of experts, researchers, policy makers, and practitioners. In 2011, coincident with the final determination of the CIW framework, the CIW project moved from the ACF to the University of Waterloo. The project is housed in the Faculty of Applied Health Sciences where the research, community outreach, and knowledge transfer activities supporting and arising from the CIW can be further developed.

Indicators Comprising the Eight Domains of Well-Being

The CIW is comprised of eight domains, each of which includes eight separate indicators. These are outlined in domain-specific reports of the CIW website (https://uwaterloo.ca/canadian-index-wellbeing/resources/reports). The separate research teams identified key indicators representing each domain following

a comprehensive review of literature in order to establish direct links between well-being and various components of their specific domain. The teams then identified indicators emerging from the literature review that were the most valid and relevant measures consistently related to well-being, including indicators that either contributed to or detracted from well-being. Following the selection of indicators, nationally representative sources of data that had been reliably gathered over a period of several years were identified.

Essentially, four main criteria were considered when deciding upon indicators. The first was validity, or the extent to which the indicator was directly related to well-being as evidenced in the literature. The second criterion was *quality* or whether an indicator could be derived from credible sources as well as ease of defining and understanding the concept. ▶ Reliability, or consistency in measurement of the indicator during the course of several years, was the third criterion. Fourth, *feasibility* was essential. This referred to the availability and accessibility of data. With these criteria in mind, each of the teams recommended 8–14 central indicators to represent their specific domain. Indicators could be either positive or negative. For a positive indicator, an increase in numerical value indicated an increase in that aspect of well-being; for a negative indicator, an increase in numerical value reflected a decrease in some aspect of well-being (Michalos et al., 2011). The number of indicators was ultimately limited to eight per domain, for a total of 64 indicators comprising the CIW.

With the indicators in place, data were compiled for the years from 1994 onward in order to establish trends for each indicator and to prepare for the consolidation of the eight indicators into a composite index for each domain. The baseline year of 1994 was selected as the starting point for tracking the well-being of Canadians because it coincided with the initiation of the National Population Health Surveys, from which most of the health statistics were drawn (Michalos et al., 2011). Moreover, this survey was planned to be regularly readministered to large, representative samples of Canadians in subsequent years. Although the first release of the CIW occurred in 2011, the choice of 2008 as the final review year for this release was based entirely on data availability for the greatest number of headline indicators. The subsequent update in 2012 used data to 2010 for the same reason.

The domains comprising the CIW and examples of indicators defining each are as follows:

1. *Community Vitality* – This domain measures the strength, activity, and inclusiveness of relationships between residents, the public and private sectors, and civil society organizations that foster individual and collective well-being, ▶ perceptions of safety in one's community, and levels of trust in others and monitors increases and decreases in rates of property and violent ▶ crime.
2. *Democratic Engagement* – This measures the interest and participation of citizens in public life and in governance, the functioning of Canadian governments and citizens' confidence in the federal government, women's representation as members of parliament, and the role Canadians and their institutions play as global citizens.
3. *Education* – This domain is concerned with the ▶ literacy and skill levels of the population, including the ability of both children and adults to function in various contexts and plan for and adapt to future situations. It tracks the availability of regulated childcare spaces, children's competencies at different developmental stages, Canada's performance in international tests relative to other countries, and educational attainment among the general population.
4. *Environment* – This measures the wise use of our natural environment that involves the prevention of waste and damage while revitalizing the quality and ▶ sustainability of all of our resources. It monitors environmental markers such as greenhouse gas emissions, energy production, ▶ ground-level ozone, freshwater yield, and viable metal reserves. It also considers Canada's ▶ ecological footprint and population levels of select plant and animal species.

5. *Healthy Populations* – This domain is concerned with the physical, mental, and social well-being of the population; ▶ life expectancy and circumstances that influence health; and access to public health services. It tracks perceptions of personal health and the quality of public health-care services, follows the outcome of selected public health initiatives, and examines the prevalence of certain diseases within the Canadian population.
6. *Leisure and Culture* – This domain measures activity in the very broad area of leisure and culture that involves all forms of human expression, particularly in the more focused areas of the arts and leisure and recreational activities. It assesses participation in areas such as physically active leisure, social activities, arts and culture, and ▶ volunteering for recreation and culture organizations. This domain also draws attention to issues of importance to Canadians such as vacation time, visits to national parks, and the amount of money allocated by households to culture and recreation activities.
7. *Living Standards* – This domain is concerned with the level and distribution of income and wealth, with particular emphasis on ▶ poverty rates, income volatility, employment, economic security, and work-related issues and outcomes. It measures income levels, income inequality, and the affordability of home ownership for Canadians. With respect to paid work, it monitors employment rates, long-term ▶ unemployment, and ▶ job quality.
8. *Time Use* – This domain measures the use of time, how people experience time, what controls its use, and how it affects well-being. It is concerned not only with the length of time people spend in daily activities such as working for pay and ▶ commuting but also with conditions which contribute to the quality of time like perceptions of ▶ time pressure, ▶ work-life balance, and availability of employee-determined flexible work hours. On a broader level, it also monitors time spent encouraging ▶ literacy among children, providing unpaid care to seniors and regular participation in leisure and volunteer activities.

Data Sources and Challenges

Most of the data for each domain are drawn from surveys administered by Statistics Canada, the national statistical agency. Among the data sources recommended and used by the different research teams were various years and cycles of the General Social Surveys; the Canadian Community Health Surveys; the Labour Force Survey; the Canadian Survey of Giving, Volunteering, and Participating; the Canadian Election Surveys; and Environment Canada's Environmental Indicators. For those indicators for which Statistics Canada data are unavailable, other credible sources are used such as the World Wildlife Fund's Living Planet Index (as part of the Environment domain) and the Royal Bank of Canada's well-regarded Housing Affordability Index (included in the Living Standards domain).

The CIW depends on the availability of regularly updated, credible, and reliable data to ensure it accurately reflects trends in the well-being of Canadians. This presents an ongoing challenge since the regularity of data collection for indicators in different domains is sometimes inconsistent. For example, data used in the Living Standards and Healthy Populations domain are gathered and released on an annual or even monthly basis. Other domains such as Time Use, Democratic Engagement, and Leisure and Culture rely on data sources that are updated less frequently. Another challenge can occur when Statistics Canada or other organizations unexpectedly discontinue certain surveys, as has happened with the Survey of Labour and Income Dynamics, which provided data used in the Living Standards domain. In such cases, alternative data sources must be located which meet the overall criteria of reliability, credibility, feasibility, and regular updates; plus the new source must provide the closest match to the one used previously in order to provide valid measurements of the indicator.

Creating the Composite Index

To create comparable index values from the raw data, the baseline values of each of the 64 indicators are set at 100 for 1994 as the first step in standardizing the scores. To determine percentage change, raw scores for each indicator in subsequent years are divided by the raw score in 1994 and multiplied by 100. The percentage changes over the years readily indicate relative improvement or deterioration in the measure from the baseline year. A simple mean score is used to aggregate the standardized values for the eight indicators within each domain. The overall mean score for the domain allows changes over time to be easily compared to other domains, as well as monitoring the extent to which well-being in each domain may be improving or deteriorating relative to overall well-being and GDP.

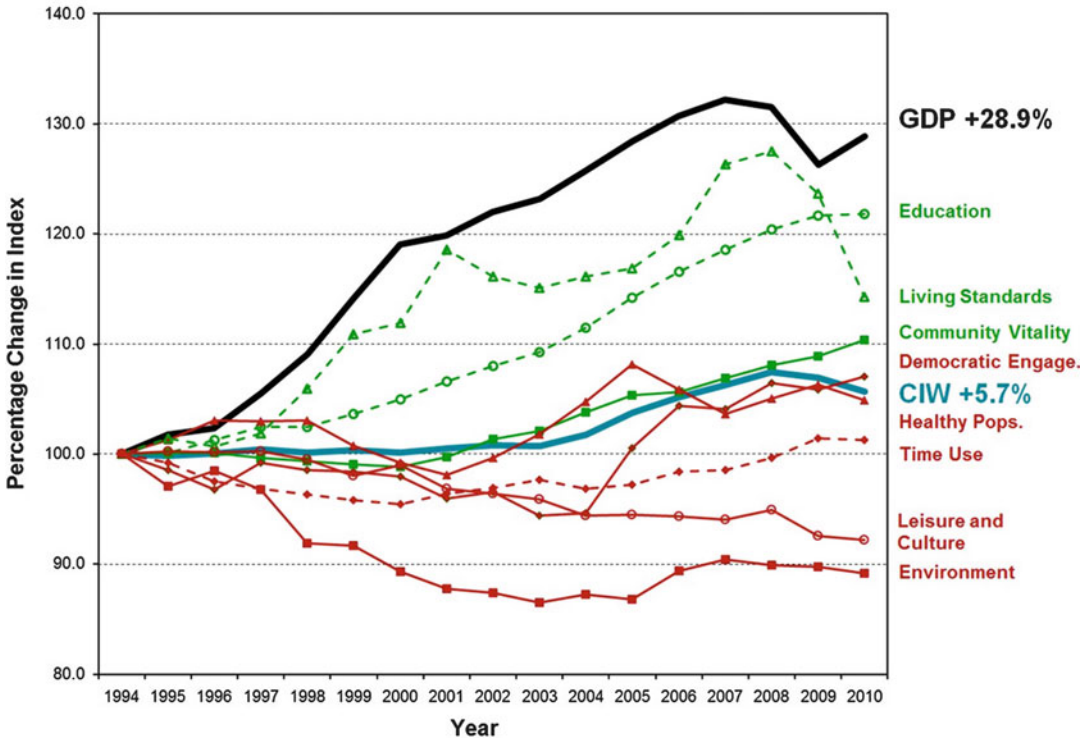
All of the indicators in each domain are assigned with an equal weight, following the assumption that without a sufficient reason for assigning greater importance to any one indicator, they should all be weighted equally. In the future, a compelling reason for assigning diverse weights might become apparent; at which point, changes in the weighting structure would be considered. At present, however, equal weighting remains preferential pending a more in-depth understanding of relationships between indicators (see Michalos et al., 2011 for further information about standardizing index values and equal weighting).

The CIW is a composite of the mean scores for each domain. Quite simply, for a given year, the mean composite scores for the eight domains are summed and then divided by eight. This produces an overall measure of well-being for Canadians. The various measures, from individual indicator to composite index, mean well-being can be described at three levels. First, the composite index provides a holistic measure, which is easily comparable to GDP. Second, the eight domain scores reflect a "dashboard" approach, which allows a snapshot of the relative status of diverse aspects of well-being. At the third level, the indicators contribute a more nuanced understanding of how specific aspects of well-being vary according to changes in ▶ social trends and policy over time.

Figure 2 illustrates the change in well-being from 1994 to 2010 for each domain relative to the composite CIW score and GDP. It shows that GDP per capita increased by 28.9 % during this time period, whereas the composite CIW grew by just 5.7 %. It also shows that only two domains, Living Standards and Education, approached the growth rate of GDP, but since the global economic recession in 2008, these domains have stalled or are dropping. Community Vitality and Democratic Engagements have generally kept pace with CIW growth, but other domains, including Healthy Populations, Time Use, and especially the Environment and Leisure and Culture, are showing either limited growth or signs of decline.

Adaptations of the CIW Framework

The conceptual framework of the CIW, organized around the eight key domains of well-being, provides a platform for policy considerations and initiatives that can be used to facilitate well-being at various levels of government or within other organizations. The multi-domain, holistic approach to well-being allows for an effective means of identifying areas where further efforts might be needed to enhance well-being. For example, the data comprising the CIW can be disaggregated to reflect changes in the well-being of subpopulations, especially those that are marginalized, and at different geographic scales, from provincial to regional and community. This allows researchers, policy makers, and citizens greater insight into the ways in which subpopulations differ with respect to well-being and to what extent. It also provides information about the domains in which some population groups or geographic locations appear to enjoy a higher quality of life and areas in which they are falling behind. Such comparisons can potentially facilitate greater collaboration among different groups and regions and the sharing of strategies and policy responses in order to address shortfalls in certain domains.



Canadian Index of Well-Being, Fig. 2 Percentage change in GDP, CIW, and composite domains from 1994 to 2010

Challenges and Summary

There are numerous methodological considerations that have arisen throughout the development of the CIW and will continue to be addressed as the CIW evolves. Some have already been mentioned (e.g., data limitations, weighting concerns). Through ongoing environmental scans and in communication with other organizations at the national and international level, a goal of the CIW is to ensure that it adopts the most effective approach to creating a solid foundation for assessing, reporting on, and promoting well-being among Canadians. Another challenge faced by the CIW is continuous validation. As Canada changes, new issues become important, new knowledge becomes available, and what is most relevant to the well-being of Canadians may change accordingly (Michalos et al., 2011). Therefore, it is essential to carefully consider the validity of each indicator during regular updates and continue to seek input and advice from a broad-based alliance of domain experts, research leaders, and government agencies.

In summary, the CIW is a citizen-driven initiative that was developed through a lengthy and collaborative consultation process to produce a measure of quality of life for Canadians. It draws upon an array of credible, regularly gathered, accessible data sources, primarily from Statistics Canada, and tracks 64 indicators, equally distributed and weighted within eight interconnected domains: Community Vitality, Democratic Engagement, Education, Environment, Healthy Populations, Leisure and Culture, Living Standards, and Time Use. The scores for each of these are combined into a composite index to produce a single figure that can be tracked over time to provide an indication of how the well-being of Canadians changes over time. Beyond assessing well-being at the national level, the CIW allows comparisons between interconnected domains to foster a greater understanding of how policies and legislation

affect well-being and which areas require more attention. It also provides an easily understandable comparison measure to GDP, in order promote perceptions of well-being beyond a purely economic perspective.

Cross-References

- ▶ Arts and Quality of Life
- ▶ Better Life Index
- ▶ Community
- ▶ Composite Index Construction
- ▶ Cultural Indicators
- ▶ Data Quality
- ▶ Gross Domestic Product (GDP) and Happiness
- ▶ Income Distribution
- ▶ Knowledge Transfer and Exchange
- ▶ Ozone
- ▶ Poverty
- ▶ Survey Research
- ▶ Time Needed to Travel to Work
- ▶ Work, Alternative/Flexible Arrangements

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Canadian Quality of Life

- ▶ Canadian Index of Well-Being

Canadian Research Data Centre Network

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Synonyms

Data repositories

Definition

The Canadian Research Data Centre Network (CRDCN), the largest of its kind in the world, links 26 university sites across Canada with three major goals: (1) to provide social science and health researchers with access to data collected by Statistics Canada as well as administrative data from Statistics Canada and some provinces, (2) to train the next generation of graduate students in the methodology and statistical procedures necessary for the analysis of secondary data, and (3) to strengthen the weak links between

social scientists and the potential users of the knowledge they generate, i.e., policy makers, NGOs, and the general public.

Description

Statistics Canada launched a series of longitudinal surveys in the 1990s to gather the information needed to measure, understand, and manage the serious challenges Canadian society faces as it moved into the new millennium. Research data centers were created to ensure that these surveys could be analyzed in depth, while respecting the confidential nature of the information in accordance with the Statistics Act. The CRDCN is above all a partnership with Statistics Canada. The network is funded with significant grants from Statistics Canada, the Social Sciences and Humanities Research Council, and the Canadian Institutes of Health Research and with 50 % of the operating costs from universities that host an RDC. Periodic grants have also been received from the Canada Foundation for Innovation, CANARIE, and Human Resources and Skills Development Canada.

Access to Data

While the ▶ Data Liberation Initiative (DLI) houses Statistics Canada standard products, databases, public-use microdata, and geographical files in virtually all university libraries across Canada, the RDCs provide secure research access in compliance with the privacy regulations of the Statistics Act to the full master files of detailed microdata in state-of-the-art social science laboratories set up specifically for this purpose.

The Canadian RDC Network began in 2001 with nine centers. There are now 26 centers across the country, with an additional 16 partner universities, involving more than 3,000 researchers from 26 different disciplines using the data. About half of the projects address the social dimensions of health and half focus on other social and economic issues (see, ▶ General Social Survey). The centers are linked by a secure high-speed fiber-optic connection, a wide area network (WAN) which permits on-line, real-time communication between researchers at different centers (see ▶ Cloud Computing).

Currently there are 11 countries in the world with similar research data centers or networks. All meet periodically to discuss increasing the sharing of data. Statistics Canada has an international committee to move this collaboration forward. Thanks to a major award from the Canada Foundation for Innovation, the CRDCN is developing metadata tools to standardize documentation of the data from Statistics Canada to be compatible with the Data Documentation Initiative 3.0 (DDI 3.0), which is becoming a worldwide social science standard.

Coupled with an initiative to use metadata to evaluate risk and manage disclosure avoidance, this development will help resolve the serious problem faced by international researchers seeking access to Canadian data and allow Canada to take its place within the larger world of social science.

Training the Future Generation of Researchers in the Social Sciences

The methodological and statistical procedures involved in the analysis of longitudinal data sets are particularly complex. The CRDCN is the training ground for both academics learning these procedures as well as graduate students. Over 1,000 graduate students have accessed the centers for their doctoral or masters level work in quantitative social science research. Virtually every center now offers a graduate seminar every year to facilitate even greater access to students. Literally hundreds of workshops, seminars, and lectures also are available annually across the network to students and other researchers.

Knowledge Dissemination Initiatives

> While the number of published articles is impressive, the true measure of success is in the impact that these results have on creating a better understanding of our society and on shaping public policies. Clearly, the impact of social science research is incremental in nature. It is generally a collective body of research that serves to inform public policy and to create a better understanding of the major issues facing our society... (Dr. Ivan Fellegi, Chief Statistician, September 2005, Opening of Ottawa RDC).

The last of the three key goals is to make a significant contribution to the relationship between social science research and social policy. While social science research rarely has a direct impact on the formulation of policy, research prepares for social policy innovations in countless ways. To achieve this, however, it is essential to disseminate research findings.

Although a great deal of RDC research dissemination is carried out by the researchers themselves, often with the support of the media and communication resources in their university or research center, the CRDCN has been developing complementary strategies. These efforts intensified at the end of 2006, when the network hired a knowledge transfer coordinator (KTO). Specifically, the KTC has been working with the network on strategies and activities to (1) take advantage of the sheer number and range of researchers working on a common theme and to (2) promote awareness of "communication" as a key part of the research process to develop tools and training tailored to the specific communication challenges faced by quantitative researchers. Our CRDCN annual conferences, research syntheses, communication workshops, and website (www.rdc-cdr.ca) development are among the ways in which we are working to create an exchange between disciplines, between the scientific and policy communities. With well over 1,000 publications already listed, new publications are constantly being added to the website. The user-friendly site allows anyone access to search by topic, researcher, data set, year of publication, and center where the work was done. While the RDCs are rarely mentioned in many research reports in the media, if confidential social statistical information from Statistics Canada has been used in the analysis, it is mostly likely the research has been conducted in an RDC.

The CRDCN is now a thriving research resource of benefit to researchers, policy makers, the media, and the public who are interested in understanding and improving the socioeconomic and health dimensions of our society.

Cross-References

- ▶ Census
- ▶ Cloud Computing
- ▶ Data Liberation Initiative (DLI)
- ▶ General Social Survey

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Canadian Water Quality Index (CWQI)

- ▶ Composite Water Quality Index

Cancer Patient(S)

- ▶ Cancer Survivor(s)

Cancer Survivor(s)

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Synonyms

Cancer patient(s); Cancer victim(s); Cancer-free patient(s)

Definition

The National Coalition for Cancer Survivorship (NCCS) defines cancer survivor as a person from the time of diagnosis and for the balance of his or her life. The definition involves two heterogeneous groups, people with active disease and cancer-free survivors. According to recent data, the latter group is considered as survivors because, although they have escaped the danger of the primary disease, they run a greater risk than the general population to be affected by cancer for a second time or to experience disturbance in many parameters of their quality of life (QOL). The term has been expanded to relatives or **caregivers**, since they are also susceptible to many of the consequences of the disease (Hewitt, Greenfield, & Stovall, 2006). However, there are still controversies about a unanimous definition of the term cancer survivor (Table 1).

Cancer Survivor(s), Table 1 Definitions of cancer survivors

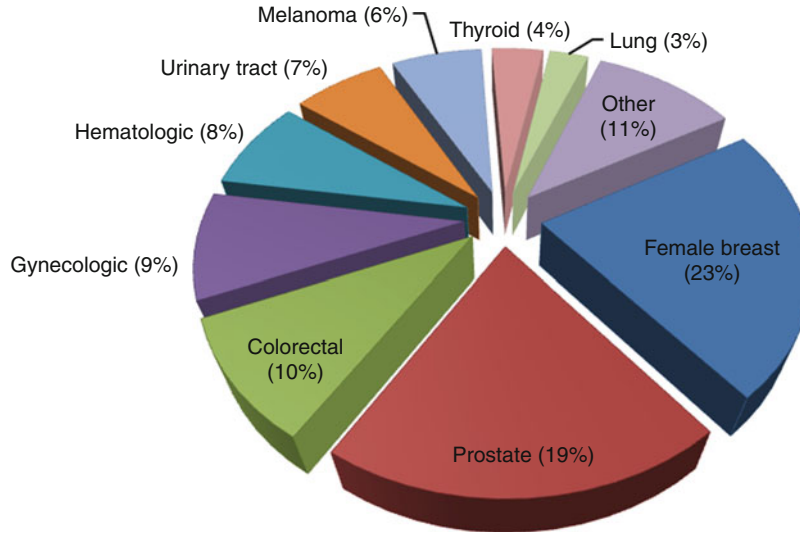
National Cancer Institute (NCI)	Cancer survivor is one who remains alive and continues to function after overcoming difficulties or life-threatening diseases like cancer
National Coalition for Cancer Survivorship and Office of Cancer Survivorship (NCCS)	Cancer survivor is from the time of diagnosis and for the balance of life. This has been expanded to include family, friends, and caregivers
Centers for Disease Control (CDC) and Prevention, Cancer Survivorship, and Lance Armstrong Foundation (LAF)	Cancer survivors are people who have been diagnosed with cancer and those in their lives who are affected by the diagnosis, including family members, friends, and caregivers
Macmillan Cancer Support	Cancer survivor is someone who is "living with or beyond cancer," namely, someone who
	Has completed initial cancer management and has no apparent evidence of active disease
	Is living with progressive disease and may be receiving cancer treatment but is not in the terminal phases of illness
	Has had cancer in the past

Description

Recent data from the National Cancer Institute (NCI) report that the number of survivors from neoplastic diseases comes up to approximately 12 million in the United States (about 3.8 % of the population, SEER Cancer Statistics Review, 1975–2008). Due to cancer prevention programs and advances in the detection and treatment of the disease, it is estimated that the number of survivors and the length of survival will increase even more in the near future (cancer survivors' boom). Nowadays, over two-thirds of adults having been diagnosed with cancer are expected to survive more than the 5-year period (SEER Cancer Statistics Review, 1975–2008, Fig. 1). For pediatric patients, the rate is even more pronounced and reaches up to 80 % (Leisenring et al., 2009). That is why cancer is currently considered as a **chronic disease** rather than an acute terminal condition (Hewitt et al., 2006). Furthermore, follow-up screening should be an important part of systematic care for the person who is affected or has been affected by the disease. Therefore, health systems, apart from diagnosis and treatment, have also to systematically care for those who have survived from cancer and whose average age is constantly rising (Ganz & Horning, 2007).

Survivorship and Quality of Life

Even though the literature often refers to "cancer survivors," an adequate definition of the term has not yet been given. The point of transition from the term "patient" to the term "survivor" cannot be defined adequately (Hewitt et al., 2006). However, for descriptive and practical reasons, survival can be categorized into *the acute survival* (from diagnosis to the end



Cancer Survivor(s), Fig. 1 Ratios of cancer survivors according to primary site

of primary treatment), *the extended survival* (from the end of treatment to the 5-year threshold), and the *permanent survival* (when the possibility of relapse is slight) (Mullan, 1985). However, according to strict criteria, the diagnosis, treatment, and the posttreatment period form a continuum that cannot be easily fragmentized into discrete periods, because of the heterogeneity of disease, demographic, and psychosocial factors.

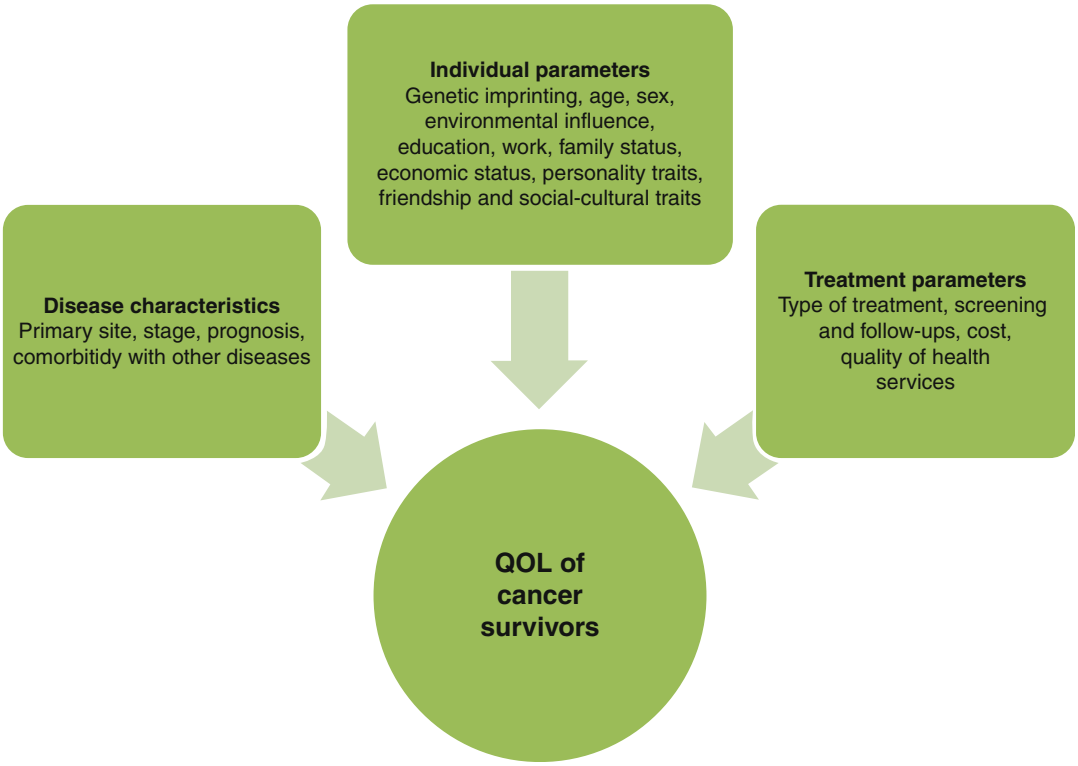
Although cancer-free survivors have escaped the risk of immediate death, still they are not necessarily cancer consequence free. The medical community has now realized that survival cannot be the sole end point of research and clinical practice. For this reason, the NCI and the Food and Drug Administration (FDA) have suggested including QOL data alongside survival and other objective biomedical end points in clinical research.

Despite difficulties and controversies over a common definition of ▶ **QOL** in health care, the ▶ World Health Organization (WHO) defines QOL as "*individuals' perceptions of their position in life in the context of the culture and value system in which they live and in relation to their goals, standards and concerns*." The concept of QOL came up in part due to the broadening definition of health from the WHO and in an attempt to define a multidimensional construct that views health as "a state of complete physical, mental, and ▶ **social well-being**." It is worth mentioning that QOL refers to the patient's ▶ **subjective indicators of well-being**, and great discrepancies have often been reported between survivor's and medical providers' assessments of QOL. The subjective evaluation gives more weight to the patient as a whole rather than the disease.

QOL in cancer care could be affected by parameters that can be grouped into three categories. As can be seen in Fig. 2, the first category regards the patient as a biological and social entity. The second category relates to disease characteristics. The third category concerns therapeutic intervention. All three categories interact with each other, thus not allowing for associations to be analyzed accurately. Indicative of the complexity is a wide range of tools developed to cover parameters of QOL.

Physical Aspects of Cancer Survivorship

Apart from the consequences of the primary disease, cancer survivors have to deal with many adverse effects of the disease and treatment or comorbidity that appears degeneratively with age (Avis & Deimling, 2008). It is estimated that about two-thirds of cancer survivors develop a chronic health condition and run a risk three times as high as that of the general population



Cancer Survivor(s), Fig. 2 Parameters affecting QOL of cancer survivors

(Oeffinger et al., 2006). Over the years, ▶ **mortality** rises proportionally mainly because of side effects and not the primary disease. Therefore, during the first decade, the risk of death and QOL depend on the recurrence of the disease, metastases, and severe or life-threatening conditions (e.g., nephrotoxicity or cerebrovascular accident). During the second and third decade, the risk of death and QOL depend on the development of secondary neoplasm and the chronic complications that are likely to emerge later in the course of life or as a treatment consequence (iatrogenic such as cardiac dysfunction, osteoporosis, second malignancies, and infertility).

As can be seen in Table 2, almost every organ and system of the body can be affected. Except for the serious consequences that demand new courses of therapeutic intervention, it has been documented that a number of symptoms adversely affect QOL, mainly ▶ fatigue, chronic pain, loss of appetite, restriction of physical performance, and loss of hair (Lenhard, Osteen, & Gansler, 2001; Miller & Triano, 2008).

Psychological Aspects of Cancer Survivorship

Most patients report that after a certain period of time following treatment, and mainly if they are disease free, they do not differ in their psychological function from healthy individuals. Research demonstrates that cancer survivors have simply adjusted to their new life. During the time period following treatment, survivors often report ▶ **anxiety**, ▶ **psychological distress**, **depression** or emotional liability, sleep disorders, **post-traumatic stress disorders**, **somatization and somatoform disorders**, **sexual function** problems, and even suicidal ideation to a greater extent than the general population (Adler & Page, 2008; Holland, Breitbart, & Jacobsen, 2010; Lenhard et al., 2001). In addition, they are likely to express ▶ **anger**, fear of abandonment or death, a feeling of uncertainty for future, or

Cancer Survivor(s), Table 2 Most common physical symptoms of cancer survivors

General	▶ Pain (somatic, visceral, neuropathic), ▶ fatigue, low energy, cachexia
Neurological	Headache, peripheral neuropathy, paralysis, acute encephalopathy, inappropriate antidiuretic hormone secretion, aseptic meningitis, somnolence syndrome, Lhermitte's phenomenon, cerebral and spinal cord radionecrosis or chemonecrosis, radiation- or chemotherapy-induced leukoencephalopathy, radiation- or chemotherapy-induced neuroinflammation, demyelination, decreased neurogenesis and neuroinflammation, neurological signs (seizures, ataxia, pyramidal or extrapyramidal syndrome), tumor pseudoprogression
Endocrinal	Thyroid dysfunctions, severe growth retardation, growth hormone deficiency, gonadal dysfunction, metabolic syndrome
Cardiovascular	Cardiomyopathies, congestive heart failure, left ventricular myocardium dysfunction or left cardiac failure, pericarditis of pericardial effusion, ischemic cardiopathies, conductivity abnormalities (atrial and ventricular arrhythmias, sinus node fibrosis, right bundle branch block, nonspecific abnormalities)
Pulmonary	Functional manifestations (dyspnea, cough, etc.), interstitial fibrosis, emphysema, hypersensitivity reaction on chemotherapeutic agents or acute respiratory distress syndrome, pneumonitis, recurrent pneumonias, pleuritis
Hematological	Anemia or erythrocytosis, granulocytopenia or granulocytosis, eosinophilia, basophilia, thrombocytosis or thrombopenia, coagulopathies
Renal/ urological	Renal failure, glomerular diseases, tubular interstitial defects, electrolytic abnormalities, radiation-induced cystitis, hemorrhagic cystitis, obstructive uropathies, urinary tract infections
Gastrointestinal	Functional changes, drug-induced gastritis, absorption disorders, ulceration, bleeding, perforation of the intestinal wall, necrosis, acute hepatotoxicity, chemical hepatitis, liver fibrosis, reactivation of viral hepatitis, colostomy problems, adhesions, bowel obstruction, fistulae, malnutrition after surgery or chemotherapy, chronic radiation enteritis
Musculoskeletal	Migratory arthralgias, myalgias, stiffness, periarticular swelling without arthritis, post-chemotherapy, rheumatism syndrome or fibromyalgia-like syndromes, exacerbations of preexisting arthritis, Raynaud's phenomenon, systemic sclerosis, osteonecrosis

vulnerability. At this phase, for patients, the core issue is survival, and they seek rapid resolution of their psychological problems (Table 3). Even after the completion of treatment, the majority of survivors still experience fear of relapse and metastases, but they gradually start thinking more positively about life. They obtain new coping abilities, self-acceptance, new perspectives, and a greater appreciation for life, as being different persons. Needless to say, those changes are individualized and depend on personal trajectories in life. On the other hand, a smaller percentage of people does not recover and continues to experience diminished QOL.

Social Aspects of Cancer Survivorship

Social activities and relationships depend on QOL at the onset of the disease and mainly age at diagnosis (Adler & Page, 2008; Jacobsen, 2009). As can be seen in Table 4, many cancer survivors experience difficulties in education and work, maintaining their insurance coverage and a basic **income**, because of the physical restrictions and psychological problems they experience. Younger people, because of relationship difficulties and ▶ **unemployment**, are likely to remain at their parents' house and find it difficult to make a family, and many of those experience a period of social isolation. The past trauma leads the person, after a period of **rehabilitation**, to a more substantial participation in social activities and to more mature choices in the future, such as finding out a desirable occupation, strengthening family relationships, and developing a social network. Life can never be the same after the onset of cancer.

Discussion

Cancer Survivorship and QOL: Where Are We and Where Are We Going

Considering QOL in cancer survivorship is essential for four main reasons. The first concerns survivors themselves. That is, QOL data alongside objective biomedical outcomes assist clinicians form a more complete view of the

Cancer Survivor(s), Table 3 Most common psychological symptoms of cancer survivors

Mental disorders and symptoms	Depression, anxiety, somatization, sleep disorders, post-traumatic stress disorder, adjustment disorder, emotional liability, psychological distress, somatic concerns, poor body image, suicidal ideation, fear of death or recurrence of disease
Personality traits	Sense of helplessness, abandonment or loneliness, vulnerability, anger and irritation, denial, underreporting problems or self-deception response about the disease, lower expectation of future life satisfaction, self-acceptance, sense of personal growth and stronger self-identity, self-esteem, changes in perspective and meaning of life (unresolved problems, philosophical views, religion beliefs), development of new coping strategies, feeling different than others, greater attention to health-promoting behaviors
Sexual	Reduced sexual desire, decreased libido, impotence, reduced frequency of sexual contacts, reduced sexual satisfaction, dyspareunia, orgasmic dysfunction, loss of ejaculation, loss of reproductive potential, concern about early menopause
Cognitive	Executive functions (difficulties in problem perception and problem-solving capacity), memory disorders (decline in the ability to learn or maintain information), decline in global intellect, attention problems, decline in visual spatial skills or perceptual motor skills

Cancer Survivor(s), Table 4 Most common psychosocial symptoms of cancer survivors

Less likely to marry and have children, more likely to remain at home with parents, changes in family relationships and friendships, difficulties with insurance and education, concern about finances and loss of job, concern about the health of children or family members, childcare problems, social skill deficits, and social isolation

individual's condition, the efficacy of treatments' and, in many cases, the evidence of relapse. By and large, QOL adds reliable evidence on the person's total level of function.

The second relates to assisting clinicians to the holistic management of patients, thus encouraging multidisciplinary cooperation for obtaining maximal benefits for the survivor. At this point, the need for well-structured and regular continuing medical education is imperative for **primary care** clinicians who are increasingly responsible for survivors' care since many of them may not feel qualified to treat survivors without adequate knowledge and a frame of **evidence-based medicine** (Bober et al., 2009; Hewitt, Bamundo, Day, & Harvey, 2007; Nekhlyudov & Latosinsky, 2010).

The third is research related. That is, the evaluation of QOL from **prospective studies** and ▶ **longitudinal data analysis** will contribute to the better understanding of the disease, its long- term consequences, the evaluation of existing treatments, and also the development of new effective agents and targeted therapies with increased safety profile. In addition, the development of well-validated QOL measures is a main issue for future research to pursue. Also, a wide range of experimental psychosocial interventions using different approaches are being tested for promoting QOL in cancer survivorship, but as to their efficacy, we can do no more than speculate until further empirical data become available (Hewitt et al., 2007; Jacobs et al., 2009; Oeffinger & McCabe, 2006).

The fourth and final reason relates to the **health-care** system. The use of QOL information should play a role in optimizing **health-care** delivery to cancer survivors from diagnosis to the end of life. Medical community needs to put together and come up with the most appropriate model of survivors' follow-up care, from a number of proposed models, for example, the shared care model, the nurse care model, the multidisciplinary model, the risk-based follow-up care model, and more specific academic or institutional cancer-based programs (Earle, 2006, Ganz, Casillas, & Hahn, 2008). Any survivorship care model should be patient centered, accessible to medically underserved populations, promote health protective behaviors, raise public awareness of cancer survivorship, and facilitate cross talk among different specialties, research, and advocacy groups and institutions. In a period characterized

by financial curtailments in **health-care** systems worldwide, it is all the more important, we believe, to come up with cost-effective approaches to cancer survivorship, which will convince policy makers to integrate them into routine clinical practice (Ganz & Horning, 2007; Hewitt et al., 2006).

To summarize, current statistics estimate that nearly 28 million people live with cancer worldwide, and their number is expected to double by the year 2050. Research has demonstrated that a significant proportion of survivors experience multifaceted difficulties in their lives. It has also been suggested that during the next decades, health-care systems will be inadequate in medical staff and infrastructure to support effectively this constantly growing number of survivors. There is thus a need to focus on posttreatment survivorship planning with evidence-based guidelines with a broad consensus so as to improve quality of care. Comprehensive cancer care should target not only to add years to life but more important to add life to the years.

Cross-References

- ▶ Anxiety
- ▶ Health Care
- ▶ Longitudinal Data Analysis
- ▶ Mortality
- ▶ Post-traumatic Stress Disorder (PTSD)
- ▶ Psychological Distress
- ▶ Quality of Life (QOL)
- ▶ Sexual Functioning
- ▶ Social Well-Being
- ▶ Subjective Indicators of Well-Being
- ▶ Unemployment

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Cancer Victim(S)

► Cancer Survivor(s)

Cancer-Free Patient(S)

► Cancer Survivor(s)

Candidate Countries Eurobarometer (CCEB)

► Eurobarometer

Cantril Self-Anchoring Striving Scale

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Synonyms

Cantril's Ladder; Ladder of life

Definition

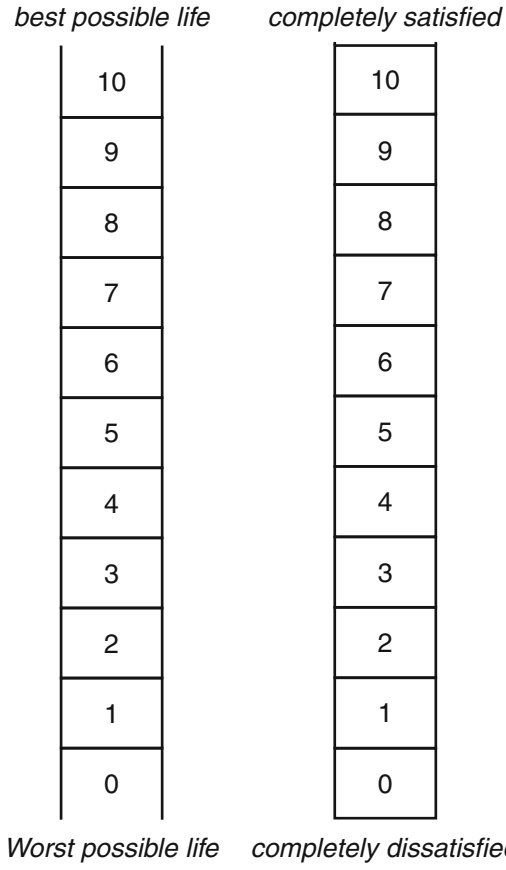
The Cantril self-anchoring striving scale or in short the Cantril-ladder is an instrument to measure people's attitudes towards their life and its components in various respects. The original scale contains a ladder with 11 steps, and the end points of the scale are defined by the respondents in terms of their best and their worst life experience.

Description

The Cantril self-anchoring striving scale is clearly described in Cantril's main publication from 1965: "A person is asked to define on the basis of his own assumptions, perceptions, goals and values the two extremes or anchoring points of the spectrum on which some scale measurement is desired – for example he may be asked to define the 'top' and 'bottom,' the 'good' and 'bad,' the 'best' and the 'worst.' This well-defined continuum is then used as our measuring device" (Cantril, 1965, p. 22).

If a certain person is asked to evaluate his life using a Cantril-ladder, he is going on as follows. "He describes as the top anchoring point his wishes and hopes as he personally conceives them and the realization of which would constitute the best possible life. At the other extreme he describes the worries and fears, the preoccupations and frustrations, embodied in his conception of the worst possible life he could imagine. Then utilizing a nonverbal ladder device, symbolic of 'the ladder of life' he is asked where he thinks to stand on the ladder today" (Cantril, 1965, p. 22). The Cantril-ladder looks rather simple as a ladder with eleven steps – sometimes nine or ten steps are used – and it is with the exception of the end points the same type as a usual satisfaction scale with eleven points (e.g., Glatzer & Zapf, 1984, p. 13) (Graphic 1).

The end points of the Cantril-ladder are explicitly subjectively defined, whereas the satisfaction-ladder gives end points which could be the same for all individuals. Presumably it was the influences of the Cantril-ladder that the most used format of satisfaction scales seem to have eleven points or steps. Besides that the Cantril-ladder is used with nine and ten numerical steps and it is also described as a stairway of eleven steps called the mountain scale (Basler, 1978, p. 191). In contrast, the satisfaction scale is used differently with many steps between two and eleven, and the ladder steps have sometimes numerical or verbal distinguishing marks.



Cantril Self-Anchoring Striving Scale, Graphic 1 Cantril-ladder and satisfaction scale with eleven steps (Source: Cantril, 1965, p. 22; self-produced)

There was an open critique of the Cantril-ladder in the book Campbell/Converse/Rodgers (1976, p. 31): "Of course the Cantril format accentuates the relative aspects, since the respondent quite consciously frames his assessment relative to his own conceptions of 'best' and 'worst'.... Since these extremes are entirely personal and situational, the frames of reference used can be expected different from individual to individual, a fact which puts interpersonal comparisons of ratings in a somewhat odd light" (p. 32). According to this critique the scientific community was divided into followers and rejecters.

The success of the Cantril-ladder is surprising. In many studies, where the Cantril-ladder is used, the results are theoretically convincing and politically interesting. The attractiveness of the Cantril-ladder did – from our point of view – not rely mainly on the anchoring principle. Moreover, when somebody gave a statement where he stood on a Cantril-ladder, he was often also asked for different points of time: in the past (5 years ago), at present (now), and in the future (5 years hence). Additionally, the respondents were asked in respect to their personal experience and the level of their nation. These two approaches connected with the Cantril-ladder seem to have constituted an intellectual charm of the Cantril-ladder.

Cantril field studies were for a selection of 15 countries around 1960 divided into rich and poor countries. These are modern and developing nations, which are among similar studies in the year 2010 (Graphic 2). The hypothesis is confirmed that in rich and in poor countries, people perceive the relationship of past, present, and future as an increasing path in 1960 and also in 2010. Today people in the two modern countries USA and Germany perceive their position above the midpoint of the Cantril-ladder; India and Nigeria rate themselves below. For all the included nations the expected future is better than the present state and the present is better than the past, but to a varying degree. In general mankind is characterized by positive future expectations. In Nigeria, the future expectations were high, and in India, they were low. In 2010, the Nigerians are expecting to almost double their life satisfaction level on the 10-point scale from 4.8 to 8.6. On the "ladder of life," modern and developing countries show significant differences in respect to past and present positions.

The Cantril-ladder was used in many studies and is still used. The Gallup research initiative, including the Gallup World Poll (Gallup World Poll [GWP], 2012) – where data for more than 150 countries are available – is adopting the Cantril-ladder and asking about the life satisfaction in the past, present, and future. Also in Gallup's poll of America's well-being (Gallup-Healthways Well-Being Index; Harter & Gurley, 2008), the Cantril-ladder is used.

	USA		Germany		India		Nigeria	
approximate year	1960	2010	1960	2010	1960	2010	1960	2010
Past	5.9	6.8	4.1	6.4	3.4	4.5	2.8	4.1
Present	6.6	7.1	5.3	6.6	3.7	4.6	4.8	4.8
Future	7.8	7.8	6.2	6.9	5.1	5.7	7.4	8.6

Cantril Self-Anchoring Striving Scale, Graphic 2 Personal ratings on the Cantril-ladder for past–present–future positions in USA, Germany, India, and Nigeria (Source: Cantril data from 1959 to 1962 (Cantril, 1965), GWP Data from 2008 to 2011 (GWP 2012))

There Gallup generates "The Life Evaluation Index" which includes a self-evaluation of two items (present life situation and anticipated life situation 5 years from now) using the Cantril self-anchoring striving scale. Taken together, respondents are classified as "thriving," "struggling," or "suffering" (Gallup, 2012).

Among others the Anamnestic Comparative Self-Assessment (ACSA), developed by Bernheim (1983), where respondents are also invited to identify the best and worst periods in their life, is often compared with the Cantril-ladder, but it ranges from the negative dimension −5 to the positive dimension +5. The process of proofing reliability and validity of the Cantril-ladder is – as for other scales – not finished, and the different versions of the Cantril-ladder are included in an ongoing competition for adequate QOL scales.

Cross-References

- ▶ Anamnestic Comparative Self-Assessment (ACSA)
- ▶ Campbell, Angus
- ▶ Satisfaction with Life Scale (SWLS), an Overview

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Cantril's Ladder

- ▶ Cantril Self-Anchoring Striving Scale
- ▶ Self-Anchoring Rating Scale

Capabilities

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Synonyms

Abilities; Skills and human capital

Definition

The term *capabilities* was given special meaning by the 1998 Nobel Laureate in Economics, Amartya Sen. A person's capabilities encompass the functions (Sen's word is *functionings*) that he/she has the potential to perform.

Description

Sen gave specialized meanings to the terms *capabilities* and *functionings* in his work on poverty (Sen, 1982, 1987, 1999). He defined poverty as lack of freedom to choose "a life you have reason to value". In order to be able to make reasoned choices about life, a person requires, according to Sen, a set of capabilities and functionings appropriate to the time and place in which he/she lives. Antipoverty policy, in Sen's view, should focus on enhancing capabilities and functionings. Alternative approaches in economics and social policy, which advocate increasing the *utility* of the poor, or their income and resources, are criticized by Sen as neglecting human freedom and choice.

Sen has never provided a definitive list of the capabilities required in a particular society. However, the *United Nations Human Development Index*, which is based on his ideas, gives equal weight to an adequate income, adequate health, and adequate education. Other writers, including Sen's long-term collaborator, Martha Nussbaum (2000), have produced much longer lists, including, for example, freedom from discrimination and adequate social networks.

In Sen's terminology, capabilities confer the capacity or potential to perform functionings. Functionings are roles and subroles. So many of us have functionings/roles which we need to perform as employees, spouses, parents, friends, and so on. Sen's concept of poverty is widely influential, especially in U.N. and economic development circles. He has been criticized for a certain vagueness and unwillingness to suggest how his ideas could be operationalized (Clark, 2006). When others have tried to operationalize his work, they have generally used fairly standard measures of human capital and health to measure ▶ capabilities, and standard social indicators across a range of domains (work, family life etc.) to measure functionings (Clark, 2006).

Cross-References

- ▶ Human Capital
- ▶ Human Development Index
- ▶ Social Indicators
- ▶ Utility

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Capabilities Approach to Economic Growth in Chile

▶ Capability and the Middle-Income Trap in Chile

Capability and Health in Ethiopia

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Definition

From a recent Ethiopian representative household survey, concepts from the capability

approach are operationalized to shed light on the relationship between conversion factors, capability inputs, and health functionings. The subjects are women in partnership. Ethiopian women's health functionings are responsive to specific household bargaining power conversion factors and capability inputs. A capability model tests the extent to which women who take more decisions achieve better health functioning. The model offers evidence that decision-making and health functionings follow a complex pattern as women who took more decisions were not always better off.

Beginning with the ethically grounded concepts of the capability approach, the extent to which capability inputs and conversion factors explain objective health functioning indicators is tested. The main objective is to understand to what extent women with more capability and bargaining power are better off in terms of health. The dataset is the 2005 Ethiopia DHS (Demographic Health Surveys). This survey provides extensive information on household decision-making, resources, and health functionings. Furthermore, because of its multiethnic composition and climatic diversity, according to Webb and von Braun (1994:1–2), Ethiopia is a microcosm for the rest of Africa and the findings may be relevant elsewhere.

The capability approach is here employed and empirically contextualized. The objective is to test how in environments of unequal gender norms conversion factors and capability inputs are instrumental to women's health functionings. Thus, where women are marginalized but important contributors to household and community life (Pankhurst, 1992:7), a better understanding of the pathways from capability to functioning is sought.

The model estimates capability from its inputs – not from extrapolated achieved functionings. Capability is here operationalized as capability to x where x can be "to play," "to be healthy," "to be happy," or "to work," among other things. The model, accordingly, aims to operationalize Ruger's (2010:81) definition of health capability as the capability to achieve health functionings.

The model adapts Robeyns's (2005) positioning of the conversion factors before the capability set. It also combines Kabeer's (1999) operationalization of capability as emerging from resources (preconditions) and empowerment (process) to Robeyns (2004) input capability measurement method. Achieved functionings are positioned on the right-hand side as outputs. Capability, thus, not only mediates between the conversion factors and functionings, it also has direct functionings effects.

The conversion factors shape the capability set of women with information on three distinct kinds of indicators: individual (age, sex), social (class, ethnicity), and environmental (urban, climate, infrastructure) (Kuklys & Robeyns, 2005). These conversion factors are subsequently hierarchically modeled as exogenous indicators and partitioned at individual, household, and institutional levels.

The model adopts a broad definition of resources involving education and earnings (Kabeer, 1999; Narayan, 2005). Health, however, is here modeled as an outcome or an achieved functioning. It is in fact a "fertile functioning" which is necessary to achieve other functionings (Wolffe & De-Shalit, 2007:10).

The determinants of health functioning are the conversion factors and capability inputs. Conversion factors have both direct and indirect (mediated by capability) effects on functionings. Social norms influencing choices are integrated as institutional conversion factor. Equivalently, capability, after controlling for the conversion factors, determines functioning. Capability is measured from inputs – resources and processes. Here, health functioning is an output to be explained (Robeyns, 2005; Strauss & Thomas, 1998:775).

In Eq. 1 the general model is expressed.

$$h = [C_{CF}(, r, \eta, \rho); x] \quad (1)$$

where h is health functioning, c capability, η decision-making index, r resources (▶ education and earnings), ρ control over earning spending, and x the conversion factors calibrating the capability set. The capability function has the subscript CF to indicate it is endogenous and only the conversion factors are truly exogenous.

The four capability inputs education, earnings share, control over earnings, and decision-making are, respectively, ordered in the system of equations. The decision-making index is therefore not the only capability input. Finally, the four capability inputs and the conversion factors explain health functionings.

Since decision-making in the household is most likely fuzzy, a single indicator can measure it with error. MIMIC (Multiple Indicators Multiple Causes) models can control for error in measurement. They have, accordingly, a measurement and a structural part. In the former, a set of indicators measured with error are aggregated to form an unobservable or latent variable (Mabsout & Van Staveren, 2010). However, the observable decision-making indicators are manifestations of the latent, error free, variable. Who actually decides in the households (has final say) is an outcome or realization of this latent variable.

Statistically speaking, the latent variable is constructed from the correlations between the observed decision-making indicators. A probit measurement model is employed to estimate the latent variable. The decision-making index scores, η, are subsequently regressed on the following "structural" explanatory variables: conversion factors x (with coefficients C), resource capability inputs r (the preconditions which include education and earnings), and the capability inputs control over earnings ρ (with the process). The conversion factors explain why some individuals have larger, and others smaller, capability sets. In other words, they "parameterize" the capabilities of individuals. To illustrate, living in urban areas may expand women's access to services, information, and mass media enhancing their capability sets (Abadian, 1996:1802). Resources include education and earnings.

The output of the model – health functioning – is measured with the body mass index (BMI) and an anemia indicator. These basic health functioning indicators are adequate because no one wants to be in bad health as various other valuable functionings depend on health (Ruger, 2010; Wolffe & De-Shalit, 2007). As Sahn and Younger (2009:17) also point out, "we feel that BMI should be taken seriously as a measure of well-being in its own right."

But the choice of functioning indicators is also in large part an ethical one because it expresses a concern for the well-being of Ethiopian women. The other major factor in the choice of functioning indicators is data availability. Nevertheless, it should be observed, the impact of low capability is multidimensional and may not reveal itself as low health functioning achievement.

The household decision-making indicators are final say type questions. Three possible answers are offered to respondents, namely, someone else has final say, shared final say, and alone final say. Decisions for daily needs are excluded because they follow a different pattern. About 50 % of Ethiopian women in relationships have final say "alone" for household daily needs due to gender roles in the household. This is confirmed by Legovini (2006:142) who also found 67 % of women in Addis Ababa and Amhara take small consumption decisions on their own. Legovini also reported as few as 16 % take their own decision for big food items and only 10 % for other important items. Somewhat similar percentages of decisions taken alone obtain with only 12 % for own health, 10 % for large household purchases, and 8 % for who to visit.

The choice of functioning indicators is a challenging task, especially since most of them feedback into capability. In practice, therefore, it is extremely difficult to identify a pure functioning which does not involve feedback effects. In light of this, objective health functioning indicators were selected from the DHS. The most fitting indicators were the body mass index (BMI) and the anemia indicator. According to the literature, these variables are important health indicators in the Ethiopian context and offer attractive statistical properties.

Description

Although the impact of low capability is multidimensional and may not reveal itself as low health functioning achievement, the findings include a positive relationship between the

(preconditions) capability inputs education and (process) decision-making capability inputs and BMI. The anemia functioning indicator – when compared to BMI – was, however, more responsive to household wealth and to bargaining indicators such as age difference between spouses (instrumented), relative earnings, and the rejection of wife-beating justification by wife. Although the anemia indicator was not correlated to the decision-making index, women who shared more decisions with their husbands were better-off.

While a strict positive linear relationship between decision-making and functioning health is not supported, decision-making patterns in household clearly matter for health functioning. These results indicate that decision-making has a nonlinear context-dependent relationship with health functioning. Women sharing decisions with their husbands achieve better anemia scores. Cooperation in decision-making in the household may in this way help improve women's anemia health functioning. Furthermore, the computation of indirect effect reveals that the impact of decision-making on health depends on priors such as polygamy or earnings share. Thus, women in polygamous relationships can have higher probabilities of taking more decisions alone, yet they are not necessarily better off compared to similar women in non-polygamous relationships. A similar finding for earnings obtains since decisions taken by women who earn more are more strongly correlated with health outcomes. Such evidence suggests that Ethiopian households are more accurately described using a noncooperative household bargaining model because outcomes could be Pareto inefficient.

The model also points out the decision-making index cannot distinguish between women who have a BMI under 18.5 from others. The decision-making index, nevertheless, distinguishes between women with a BMI less than 20 from others. In other words, women whose BMI is less than 20 tend to take fewer decisions in the household. Some hypotheses explaining this relationship were offered. It was also observed here that women who earned more (relative to husband) could reduce the probability of BMI falling under the risk threshold of 18.5.

To conclude, this entry highlights that policy interventions should not only focus on traditional empowerment indicators such as earnings and education. Furthermore, policy assessments and interventions should also incorporate novel indicators such as household decision-making patterns when targeting individual health functionings.

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Capability and the Middle-Income Trap in Chile

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Synonyms

Capabilities approach to economic growth in Chile; Low levels of growth and productivity in Chile; Social capabilities in Chile; Technological capabilities

Definition

The middle-income trap (MIT) is a term referring to middle-income countries that cannot compete with low-income countries on the basis of low wages, but at the same time have not developed the necessary capabilities to compete with high-income countries on the basis of innovation, technological change, and knowledge-intensive goods and services (Paus, 2012a). Countries in the MIT face significant difficulties in finding a strategy that allows them to sustain growth in the long run and convergence toward high-income country standards. Some of the manifestations of the MIT include declines in the trend rate of growth, falling levels of ▶ productivity, reduced external competitiveness, and, in some cases, high levels of social vulnerability.

The *capabilities approach* (developed in Paus, 2012a, 2012b; Prime, 2012; Sanchez-Ancochea, 2012, Abugattas-Majluf, 2012; Pérez Caldentey, 2012) is a recent and novel approach to an understanding of the MIT. In line with the existing consensus found in the literature, it traces the MIT to the inability of countries to undergo a process of structural change toward innovation and more knowledge-intensive production. However, the *capabilities approach* goes further and argues that long-run productivity and ▶ economic growth are underpinned by the accumulation of technological capabilities allowing for broad-based structural change toward high-value activities. In turn, technological capabilities are a function of firm and social level capabilities interacting at a point in time and, over time, within specific national and global historical contexts. Chile, a small middle-income country in the southern cone of South America, which specializes in natural resources and that has reached the upper income limit of a middle-income country, exemplifies the predicament of the MIT. At the same time, the case of Chile illustrates the usefulness of the *capabilities approach*.

Description

The greater majority of developing countries, including those of Latin America, are considered middle-income countries. The middle-income country status is defined by a gross national income per capita (GNI) level ranging between US$ 1,026 and 12,475 dollars according to the World Bank (2012a) (Other international organizations do not exclusively rely on income per capita indicators to define middle-income countries. See Nielsen, 2011). The empirical evidence shows that middle-income countries that have reached their technical innovation frontier tend to experience a slowdown in growth, undermining their possibilities to achieve advanced country level status.

In order to avoid falling into the MIT, middle-income countries need to raise their rates of growth and sustain them through time (Eichengreen, Donghyun, & Kwanho, 2007; Kharas & Kohli, 2011; Izvorski, 2011). *The capabilities approach* argues that this requires a process of structural change that shifts production toward activities with greater value added and knowledge intensity resulting in broad-based upgrading. Within this approach, broad-based upgrading is the result of the interaction between two sets of capabilities, firm and social level capabilities, contingent upon location and country-specific factors (Paus, 2012a).

Capability and the Middle-Income Trap in Chile, Table 1 Selected indicators of long-term trends in the Chilean economy (1990–2009)

	1990–1998	1999–2003	2004–2007	2008–2009
Rates of growth of trend and potential GDP (%)				
Trend real GDP (constant $2000)	5.1	3.1	2.3	1.3
Potential GDP	7.2	4.0	4.2	. . .
Rates of growth of export volume (%)				
Export volume	9.6	6.1	7.2	−2.6
Foreign direct investment (as % of GDP)				
Foreign direct investment (inward flows)	5.7	7.0	6.8	8.9
Mergers and acquisitions as percentage of total FDI	35.40	29.50	25.00	28.09
Productivity indicators (using different methodologies)				
Contribution of total factor productivity to growth	27.8	25.9	0.0	. . .
Rate of growth of productivity	3.9	3.3	1.4	. . .

Note: Potential GDP was computed on an incremental capital-output (ICOR) methodology. Trend real GDP was computed using a Hodrick-Prescott filter. The data for the contribution to total factor productivity was obtained on the basis of standard production function. The data for rates of growth of productivity and the productivity gap were obtained using the PADI methodology developed at ECLAC
Source: Pérez Caldentey (2012)

The notion of capabilities is related to the production possibility set and the technological frontier of a country. This differs from other uses of capabilities in the economic literature such as that found in Sen (1985, 1992) where capabilities refer to "a set of beings and doings that reflects a person's freedom to lead one type of life or another" (1992, p. 40).

The case of Chile, a small open economy of 16.5 million people with a GDP per capita close to US$ 19,000 dollars (measured in Purchasing Power Parity terms), with a narrow production structure and export base exemplifies the MIT problem (Pérez Caldentey, 2012). Chile is often termed a middle-income success story as it has managed to deliver stable and solid growth with low, controlled inflation. But it has reached a point where economic stability is proving to be insufficient to generate the required growth to move forward to a developed country status.

Chile, as other middle-income countries at a similar income level, has experienced in the past decade a slowdown in its trend rate of growth (Table 1). This is explained to a great extent by a productivity decline. A decomposition exercise of the overall rate of growth of GDP into factor accumulation and total factor ▶ productivity shows that the decline in the latter explains most of this growth slowdown. The contribution of total factor productivity to economic growth stood at roughly 33 % in the 1990s. Thereafter, between 1998 and 2003, the contribution of total factor productivity to growth decreased to 26 % and since then has been very low.

This performance responds to a great extent to policy-induced changes that have focused mostly on promoting free market policies with selective government interventions leading to a structural change that is not growth inducing. The structural change has mostly benefitted natural resource-based sectors and some services sectors.

In Chile, mining activities are predominant and have grown in importance over time. Up to 1999, their share in GDP reached 7 % increasing to 20 % in the 2000s. Chile is currently the most important copper producer in the world (34 % of global copper production) and the largest holder of reserves worldwide (28 % of total). The exports of natural resources represent, in general, more than 80 % of total exports of goods. Copper products represent at least 50 % or more of the total exported to the world. This pattern of productive specialization and exports is reflected in the composition of foreign direct investment (FDI) which is also oriented to a large degree toward mining.

Capability and the Middle-Income Trap in Chile, Table 2 R&D expenditures as a percentage of GDP by selected countries (1960–2008; averages)

	1960–1969	1970–1979	1980–1989	1990–2000	2001–2008
Argentina	0.57	0.81	0.4	0.37	. . .
Brazil	. . .	0.53	0.44	0.84	. . .
Chile	. . .	0.32	0.43	0.57	0.64
Colombia	. . .	0.05	0.11	0.27	. . .
Mexico	0.17	0.19	0.33	0.33	. . .
Venezuela	0.09	0.33	0.31	0.39	. . .
Costa Rica	. . .	. . .	. . .	0.31	0.37
Latin America and the Caribbean	. . .	. . .	. . .	0.55	0.58
OECD	. . .	. . .	. . .	2.28	2.36
Singapore	. . .	. . .	. . .	1.69	2.26
Ireland	. . .	. . .	. . .	1.22	1.22
Jordan	. . .	. . .	. . .	. . .	. . .

Note: . . . denotes not available
Source: World Bank Development Indicators (2012b)

Natural resource sectors have become highly productive and technologically sophisticated, but at the same time, these exhibit weak and limited linkages at the industry and inter-industry level and in terms of job creation to promote broad-based upgrading with the rest of the economy. As a result, these sectors have not generated productivity spillovers (multiplier effects) at the economy-wide level sufficient to spur overall growth and development. This finding also applies to small natural-based subsectors (forestry and fishery) which the country has managed to turn into pockets of excellence in terms of productivity and efficiency.

At the same time that natural resource sectors have blossomed, the manufacturing sector characterized by strong linkages with the rest of other productive sectors has shown a marked and persistent decline over time. Between 1970 and the 2000s, the contribution of the manufacturing sector to GDP has diminished from 27 % to 13 %.

Other factors that can explain the productivity slowdown include the absence of an innovation culture reflected in the fact that innovation and research expenditure are simply not a typical part of a firm's business strategies. The private sector, as well, has a low participation in R&D expenditures which at the national level (0.64 % of GDP for the period 2001–2008) are still below developed country standards (2.4 % of GDP for the OECD on average for the same time period) (Table 2).

The limited innovation effort is reflected in the limited development of the social capability base of the country. Chile ranks significantly below developed countries in the production of graduates in the scientific and technological fields and in research activities. Evidence for the period 1996–1999 indicates that PhDs in science per million inhabitants for Chile reached only four. For the same period, PhDs in science per million inhabitants in South Korea, Ireland, and the United States reached 49, 82, and 91, respectively. The development of the social capability base is further constrained by the unequal access to education which is prevalent within most levels of education and within income levels for the same educational group.

As in the case of other developing countries, Chile has become aware of the need to foster productive diversification and place a greater focus on innovation and structural change. The country has undertaken very recent policy initiatives aimed at upgrading efforts in those industries and sectors in which the country has displayed its comparative advantage. As such, this policy still focuses on natural resources.

Moreover, the funds and instruments at the disposal of the government are still limited questioning their effectiveness.

The case of Chile can provide important lessons for other small latecomers to escape the MIT. First, the case of Chile shows that income convergence cannot be sustained over time unless it is accompanied by capability convergence.

The second lesson is that natural resources should not be considered a curse. Rather, natural resources should be seen as "specific location assets" that can provide a basis for capturing resources and rents that can be used to fostering economic and social development as well as a vehicle for upgrading.

A third important lesson is that economic stability, by itself, is a necessary but insufficient condition to spur productivity growth. Macroeconomic stability should not be seen as the main objective of a policy seeking to improve living standards. Moreover, a macroeconomic framework that is too narrowly focused on achieving nominal stability may be detrimental to sustained growth and development. Stabilization policy affects the long-run outcomes of an economy, and in this sense, it should be growth and ▶ development oriented.

A fourth lesson is that deliberate government intervention is essential to develop the productive sectors and a diversified export base. Within this line of thought, industrial policy needs to create the broad-based capabilities across the productive base. This requires strong and coordinated policies to bring about the transformational change. In this sense, a balanced growth policy is needed.

Finally, improving firm level capability involves a proactive government, the right mix of incentives, adequate funding for R&D, a balance mix between basic and applied research, and more private sector involvement. But it also goes hand-in-hand with the improvement in social capabilities and especially in education access and quality. Initiatives to promote R&D will materialize, provided the social capability base exists to engage in the type of research needed at the required scale. Capability improvement and upgrading must be part of a concerted and simultaneous policy effort.

Cross-References

- ▶ Economic Efficiency
- ▶ Government Consumption
- ▶ Wealth Index
- ▶ Well-Being of Nations

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Capability Deprivation in the USA

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Synonyms

Capability suffering in the USA; Deprivation; Human development and capabilities in the USA; Poverty in the USA

Definition

Capability deprivation indicates a weak state of capability or some form of capability suffering. Those without adequate capabilities cannot function as healthy and creative human beings and thus are considered to be capability deprived. Capability in this sense is the "inner strength" of an individual that enables converting commodities or characteristics into resources which are useful to maintain some form of living standard or quality of life. The idea is highly subjective with the relative importance of the different aspects of inner strength depending on the specific context. What is more fundamental, however, is whether or not one has the capability to function as a fully participating member of society with a lack of it severely constraining the degree of choice or freedom to lead a desired lifestyle. The measurement of this abstract concept has been challenging to say the least. Drawing from Wagle (2009), this piece provides the core ideas of capability deprivation together with its measurement in the USA.

Description

Initially expounded by Amartya Sen, capability constitutes the ability to achieve "functionings" or the things that societies or individuals value and have reasons to value. Functionings or achievements are considered to be the ends in human lives, with the capability indicating the freedom or choice that people need in order to make these functionings happen (Sen, 1987a, 1992, 1999).

Rejecting the long-held thesis that income or gross domestic product can effectively capture the state of human development, proponents of this approach claim it is the human capability that needs to be used to monitor development progress (Deneulin, 2006; Nussbaum, 2006; Nussbaum & Sen, 1993; Sen, 1999). Because people have different values, interests, preferences, and motivations, the ability to expand human capabilities constitutes a more uniformly acceptable and comparable form of progress (Sen, 1992, 1999). No matter how much financial, social, cultural, or technological accomplishments are made, for example, societies cannot be better off without expanding people's fundamental capabilities. This notion of capability and its expansion have remained core agendas of the United Nations Development Program (UNDP, 1990, 2010) in its functions as well as attempts to assess the progress in development across the globe.

Functionings or achievements that are the ends or outcomes have constitutive values whereas capabilities that are taken as the means have instrumental values to make such functionings or achievements happen. The level of education one possesses, for example, provides freedom to do the things that one wants to do including earning incomes needed to maintain a desired lifestyle. Income or the type of life maintained with it constitutes the outcome or functioning, with education having an

instrumental role in achieving it. To complicate further, capabilities such as education typically also have intrinsic values given the importance that society places on them and/or the roles that being an informed person can play in determining human or societal well-being.

Measuring Capability Deprivation

The capability deprivation provides a multidimensional space in which one's position on deprivation can be projected and evaluated. Because capability indicates the degree of freedom enjoyed with an ability to lead the type of life one values and has reasons to value, at the core of this multidimensional space is the actual freedom that he or she enjoys. Functionings, freedom, and choices are abstract and highly interrelated theoretical concepts that are difficult to measure due to their "idealistic" flavor. Capability in turn influences the way functionings, freedom, and choices are realized, and albeit still abstract in character, is also operationally more palatable because of its focus on what one has rather than on what one could do or be.

There have been many attempts to operationalize the capability approach to measure poverty, deprivation, and quality of life (Alkire, 2002; Berenger & Verdier-Chouchane, 2007; Nolan & Whelan, 1996; Wagle, 2008a, 2008b). A more influential operationalization comes from the UNDP (1990, 2010) focusing on the fundamental aspects of capability to monitor the progress on human development. The initial capability poverty measure focused on health and educational indicators (UNDP, 1990). But the annually published human development indices also incorporate income and unemployment measures (UNDP, 2006, 2010).

Despite all-encompassing theoretical discussions, knowledge, health, and prestige, or self-respect, have been depicted as the most fundamental indicators of capability for their both constitutive and instrumental values (Muellbauer, 1987; Nussbaum & Sen, 1993; Sen, 1987a, 1992, 1999). Income, commodities, and other indicators of living standard sometimes used to measure deprivation (Alkire & Foster, 2011; Coleman, 1990; Rankin & Quane, 2000; UNDP, 2010) are less relevant to measure capability since they are confined mostly to their constitutive values.

Quality of life or functioning depends on many factors including capability and other contextual and demographic profiles by which preferences and needs tend to change across individuals and societies (Sen, 1987b). That commodities such as accommodation, food, clothing, and amenities are not relevant to measuring capability from the functionings perspective is also empirically substantiated (Lelli, 2001). No doubt, more systematic measurement and analysis of capability deprivation would require using a comprehensive list of indicators encompassing one's inner strength as well as relationships to society as in the case of systematic discrimination or social exclusion (Sen, 2000). The outcomes of any attempt to measure capability deprivation need to be taken in light of these conceptual shortcomings. But a combination of such indicators as knowledge, health, and self-respect provides a compelling basis for methodological advancement in the measurement of capability.

Capability Deprivation in the USA

As an advanced, industrialized nation, the USA is expected to witness a relatively low degree of capability deprivation. It is partly for this reason that capability derivation has not been much of a research or policy focus in the USA. The UNDP's ongoing effort at measuring human development by using capability as well as other aspects of human development (such as income or GDP) provides data on the USA and other advanced countries as a reference for the progress in the developing world. While this measurement attempt with the *Measure of America* launched by the Social Science Research Council (Lewis, Burd-Sharps, & Martins, 2008; Lewis, Burd-Sharps, & Sachs, 2010) has been expanded to the different subnational levels of the USA, the specific degrees of capability deprivation have not been measured.

Using data from the General Social Survey, Wagle (2009) attempts to examine this with a comparison between 1994 and 2004.

No doubt, the degrees of capability deprivation depend on the specific methodology used to aggregate individual status on different indicators into the overall capability deprivation scores. The specific assumptions about the threshold, the cases above which can be identified as deprived, also matter. But findings suggest that between 3 % and 12 % of the population were considered to be capability deprived in the strictest sense in 1994, with the figure declining to between 2 % and 7 % after a decade. These figures show deprivation in a more pure sense identified as a combination of the deprivation on all of the three dimensions used – education, health, and prestige. There is also a wide range of outcomes yielded by different methods of identification since deprivation in its strictest sense across all dimensions can be different from the one by the aggregate scores. If deprivation on one of the dimensions is taken to constitute capability deprivation overall, for example, the magnitude of deprivation would climb to 39 % for 1994 and to 33 % for 2004. The degree of deprivation would be somewhere in between following the assumption that those deprived on at least two of the three dimensions would be capability deprived overall.

One can question the validity of these deprivation estimates especially since they are shown to have declined considerably during the decade. This can be examined in two ways. First, the higher end of the estimates especially for 1994 is comparable to the magnitude of income poverty which the same study found to be about 12 %. While income poverty did not change significantly by the end of the decade, the degree of capability deprivation declined quite dramatically. Since the General Social Surveys do not measure different kinds of incomes in precise terms, however, the poverty outcomes from them can be only indicative at best. By and large, the figure is also comparable to the income poverty figure of around 15 % for 1994 even though the declining landscape of capability deprivation is not in line with the increase in income poverty to 15 % by 2004 as shown by data from the Current Population Surveys (US Census Bureau, 1995, 2005).

Second, the estimates obtained here have depended on the data on respondents' self-reported assessments. While the data on education have not varied much over time, those on the status of health and prestige demonstrated considerable variations. With similar sample sizes, for example, the proportion of respondents whose assessments are identified as deprived on the health and prestige dimensions of capability declined by over 35 % during the period. Given the self-reported nature of data, moreover, this may have reflected on the condition of deteriorating health and recognition, issues that have to do with the overall public and social support systems and practices. What is more important than external comparability, however, is the internal consistency with changes on the assessment of the status of health and prestige explaining variations over time.

Enormous challenges exist in measuring capability deprivation. The problem is more so because such measurements need to be consistent not only over time but across contexts also. What counts as an important element of capability may also vary depending on sociocultural norms and practices. But the task undertaken by Wagle (2009) represents an important step in the right direction as it helps spark the debate on both the substance in concept and the methodology in measurement, refining the outcomes further. In one important way, these deprivation measures can provide better assessment of the capability that people have to realize income, consumption, and other resources needed to achieve central qualities of life. Data suggest, for example, that not all capability deprived are income poor, neither are all income poor capability deprived. While these differences depend on the use of specific methodology in identifying the capability deprived, data also suggest that the status on capability deprivation is more predictable by the major socio-demographic characteristics. This is further indication that people's socio-demographic positions are more directly related to their capability deprivation than to their income poverty. Even though positions in income and poverty may be arbitrary depending on a variety of individual and labor market factors,

many aggregate level, society-wide factors determine the inner strengths or capabilities that people need to enjoy broader notions of freedom and quality of life.

Capability Deprivation and Quality of Life

Capability deprivation indicates one of the most fundamental aspects of quality of life. It does not directly measure quality of life as the latter involves a number of different dimensions along the lines of health and nutrition, security, and economic, political, psychological, and sociocultural well-being. But capability deprivation indicating the inner strength of the individual allows one to realize the freedom that is needed in making improvements along all of these important quality of life dimensions. It would not be an understatement to say that capability is at the core of the different dimensions of life that make human life itself worthwhile.

Cross-References

- ▶ Capabilities
- ▶ Consumption
- ▶ Economic Well-being
- ▶ Low Income
- ▶ Poverty
- ▶ Poverty Lines
- ▶ Poverty Measurement
- ▶ Quality of Life
- ▶ Social Exclusion
- ▶ Social Policy
- ▶ Social Welfare

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Capability Suffering in the USA

▶ Capability Deprivation in the USA

Capability, Functioning, and Resources

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Synonyms

Composite index; Eudaimonia and capabilities; Welfare; Well-being

Definition

Capability, functionings, and resources are the three core concepts in Amartya Sen's capability approach (Sen, 1985a, 1985b). They form the basis to understand individual well-being and ▶ quality of life in a broader fashion than the standard economic account of well-being. Through resources, conceived in a broad fashion and including market as well as nonmarket goods and services, the individual derives well-being. Well-being here does not refer simply to preference satisfaction, ▶ utility, or ▶ happiness but is constituted by the achievement of valuable functionings, which are multiple aspects of a person's life, what the person is and does. Based on an individual's resources, monetary, and nonmonetary constraints, as well as the individual's preferences over different life goals, the individual will select and reach a certain amount of functioning achievement. Capability to function then finally refers to a person's set of achievable functioning vectors. It is the ultimate measure of well-being for a person in Sen's framework as it reflects the substantive (positive) freedoms and opportunities an individual enjoys in life.

Description

The capability approach is an evaluative framework to assess individual welfare, where living is seen as consisting of a set of functionings. These represent different aspects of the life of a person or the achievements of an individual. A functioning tells us something about what a person is and what she does. To assess a person's well-being, not only "utility" or "being happy" (as in happiness research or the utilitarian tradition) counts but other intrinsic values as well: examples for other functionings are "being nourished," "avoiding premature mortality" (Sen, 1992, p. 39), or "being in good health," "being well-sheltered," "being educated," or "moving about freely" (Kuklys, 2005, p. 10). This makes the approach multidimensional, as a person's state of being (and her individual activities) is a vector of non-reducible, intrinsically valuable functionings.

This intuition can be formalized in the following simple way (Sen, 1985a): we start with a vector of commodities $\mathbf{x}$ out of the set of all possible commodities (or more generally: resources) X. This can include nonmarket goods and services as well and is thus more broadly

oriented than the standard welfare view. $\mathbf{x}$ is mapped into the space of characteristics (Lancaster, 1966) via the conversion function $c(\cdot)$ so that $\mathbf{c} = c(\mathbf{x})$ would be a characteristic vector of a given commodity vector $\mathbf{x}$. Sen assumes that the characteristics of a commodity do not vary across individuals but are the same for everyone. Do persons profit differently from these characteristics? Someone suffering from a parasitic disease would benefit less from the characteristic "caloric content" of a loaf of bread than someone being well-fed (Sen, 1985a, p. 9). This is reflected by the conversion function of an individual f_i that maps a vector of characteristics into the space of functionings (F is the set of all possible conversion functions). This conversion is influenced by the conversion factors $\mathbf{z_k}$, where we can distinguish individual ($\mathbf{z_i}$), social ($\mathbf{z_s}$), and environmental ($\mathbf{z_e}$) influences (Kuklys, 2005, p. 11).

Individual conversion factors can vary over a wide range of attributes, such as gender, intelligence, and physical (dis)abilities. Social influences are legal regulations, population density, etc. Examples for environmental factors include climate, environmental pollution, and so on. These conversion factors can be seen as nonmonetary constraints an individual faces. Note that selection of some of the conversion functions is part of an individual's capability to function while, of course, some conversion functions are just not eligible, for example, being female or male, and thus outside an individual's control (Sen, 1985a). Summing this up, a vector of functionings $\mathbf{b}$ of a person depends on resources and monetary and nonmonetary constraints in the following form:

$$\mathbf{b} = f_i(c(\mathbf{x})|\mathbf{z_i}, \mathbf{z_e}, \mathbf{z_s}),$$

When choosing how to live, a person chooses, depending on her (idiosyncratic) preferences, from different functioning vectors. The set of all feasible functioning vectors for a person i is this person's capability set Q_i. It is a derived notion and represents the person's opportunities to achieve well-being, reflecting the various functionings that are potentially achievable (given her constraints X_i, $\mathbf{z_k}$). This set can now be defined as

$$Q_i(X_i) = \{\mathbf{b_i}|\mathbf{b_i} = f_i(c(\mathbf{x_i})|\mathbf{z_i}, \mathbf{z_e}, \mathbf{z_s}) \text{ for some } f_i \in F_i \text{ and for some } \mathbf{x_i} \in X_i\}.$$

With its focus on capabilities and functionings, Sen's framework has an outcome and an opportunity side to individual well-being. Following Sen, capability scholars usually stress the opportunity side as the more central dimension of individual well-being.

Discussion

The capability framework is a widely applicable and attractive framework to assess individuals' quality of life, departing from a narrow focus on individuals' standard of living toward a multidimensional assessment not only of individuals' outcomes but also more importantly their substantive freedoms. With the latter orientation also comes a strong emphasis on the agency aspects of a person's life (Sen, 1985b, pp. 185–7). The approach so far has been fruitfully applied on many different layers of abstraction, from theoretical-philosophical analyses to applied empirical assessments of well-being in functioning space (where it is not restricted to the assessment of ▶ poverty and ▶ inequality, as in Sen's initial studies, e.g., Sen, 1985a, but also applicable to the assessment of well-being in industrialized countries, e.g., Kuklys, 2005).

The capability approach has been devised with a certain openness regarding many of its key concepts. One instance of this regards the selection of a set of valuable functionings ("the question of the list," see Robeyns, 2005, pp. 105–7). Sen favors this openness and stresses the deliberative social dimension that is involved in choosing a set of valuable functionings, but other authors have promoted lists of functionings that supposedly reflect a common consensus of what is valuable (e.g., Nussbaum, 2003) or at least argued for methodologies for selecting

functionings (Robeyns, 2005). Based on the openness of the approach, the empirical literature on functioning measurement has happily focused on different, often ad hoc ranges of functionings and established several competing ways of measuring how well individuals are able to convert their resources into functioning achievement (for a quite recent survey, see Kuklys, 2005). This multitude of methodologies introduces a certain arbitrariness into the welfare assessments within the capability approach that is exacerbated through the lack of guidance on how to trade-off the different dimensions of well-being, that is, how to weight different functionings vis-à-vis each other (Slesnick, 1998, pp. 2148–9).

This is only one example of a crucial underspecification of the capability approach. Despite its success, there are important additional questions left unanswered so far and a number of difficulties for scholars to overcome. One question that has received much attention is the list selection problem, perhaps undeservedly so (Robeyns, 2005). While many suggestions for a concrete list of functionings (or substantive aspects of an individual's quality of life) share a great empirical overlap (Qizilbash, 2002) and lead to empirically quite similar assessments of welfare in functioning space, the more pressing problem seems to stem from the approach's lack of a dynamic orientation. It is left open how valuable functionings might change over time while it can be conjectured that they do: innovative economies see a continuous self-transformation of society through innovations, and it would be implausible that this should not affect individuals' valuations of the good life (Binder & Witt, 2011, 2012). To the extent that the list of functionings then would change alongside individuals' preferences for what makes it on the list, a dangerous "subjective turn" (Sumner, 2006, p. 9) is introduced into the approach: adaptive preferences, one of Sen's main points of criticism about the standard economic welfare framework, then make their reappearance in an approach that was designed to avoid this very problem for welfare assessments.

Measuring the actual capability to function has also proven to be empirically nontrivial and few studies attempt to do so (but see Anand & Hees, 2006; Anand et al., 2009; Anand, Hunter & Smith, 2005). Measuring one's actual freedoms is informationally very demanding since it is not sufficient to look at what the individual has achieved. Capability to function would necessitate to somehow also measure all the options potentially open to an individual, thus involving hypothetical states of the world. It is not surprising that this has proven to be a demanding task for scholars so far. Even if possible to come to a measure of a person's capability set at time t, the lack of a dynamic orientation of the theory proves problematic since it is ill-suited to deal with scenarios of the following sort (Brandolini & D'Alessio, 2009, p. 109–11): a person's capability set at time t, Q_t, might reflect voluntary choices of the person at time t-1. A student willingly commits to years of study in relative poverty in order to later secure a better job. That student might initially have foregone a bigger opportunity set (through work without study) to later have an even larger opportunity set. The approach leaves these complications unanswered, although they can be conjectured to be pervasive in the assessment of welfare in opportunity space.

A similar problem bedevils the notion of conversion factors (and functions), which are theoretically quite clear as well but much more difficult to address empirically (Brandolini & D'Alessio, 2009). Due to difficulties of measurement, the empirical examination of conversion factors and functions has not received much attention in the literature (but see, e.g., Binder & Broekel, 2011, 2012; Chiappero-Martinetti & Salardi, 2007).

Finally, with regard to the interplay of the three key terms of the outcome side of the approach, namely, resources, functionings, and conversion factors, there exists a vexing theoretical "circularity problem" that has so far been neglected (Binder & Coad, 2011). It results from the way key concepts in the capability approach are related to each other: one central tenet of the approach is that individuals achieve valuable functionings through the conversion of resources they command, subject to intervening conversion functions (and conversion factors). While conceptually clear cut on this level of

abstraction, the relation between resources, functionings, and their conversion is empirically less clear, since some functionings might be considered resources for other functionings, some resources might be actually considered functionings, and so on. This problem refers to an entanglement (or endogeneity) of these concepts that cannot easily be resolved. Consider the functioning "being in good health": it seems obvious that health is influenced by material resources (Smith, 1999). But then, achievement in the health dimension would also affect the individual's resources (sick individuals might not be able to pursue a job, see Arrow, 1996). Similarly, "being in good health" has an influence on "being happy," but the reverse holds, too (Easterlin, 2003). Now consider the functioning "being educated": here, too, an individual's education can be conjectured to be influenced by resources. But education can also have an influence on resources (individuals having invested in higher education tend to have better jobs and earn more money, see Becker, 1964). Moreover, the achievement in this dimension might strongly influence functioning achievement in the health dimension and so could be a resource or a conversion factor in this case (better educated individuals tend to live healthier life-styles, see Grossman, 2005). It is not altogether clear what an individual's functionings are and what the individual's resources are. The more functionings one looks at, the more interdependencies between them and the resources side can be expected (this also pertains to conversion factors that might be considered either resources or functionings in different contexts). Econometrically speaking, this creates the difficulty of deciding which factors should be on which side of the regression equation. The circularity problem has been recently recognized as troubling the empirical measurement literature (Anand et al., 2005, p. 53, Robeyns, 2005, p. 95). As argued in Anand et al. (2009), empirical approaches to functioning measurement have to *implicitly* (dis)solve this entanglement by specifying a regression equation and functional form, but there is also at least one explicit way to address this issue and find out how functionings and resources are interrelated (Binder & Coad, 2011): if one acknowledges that all these variables are interrelated and mutually determined, it would not be realistic to view one variable as the exogenous stimulus and the other as the outcome. It would be better to view different variables as inextricably linked together and coevolving over time. In this context of complex interactions and mutually endogenous variables, an appropriate statistical technique for such a system would be a reduced-form vector autoregression, where all relevant variables are explicitly modeled as mutually endogenous and it becomes possible to analyze which functionings relate with others and so on, exemplified by the following regression equation:

$$b_{i,t} = \alpha + \sum_{\tau=t-s}^{t-1} \beta_\tau * b_{i,\tau} + \gamma * X_{i,t-1} + \varepsilon_{i,t},$$

where **b** is a vector containing the main endogenous variables in functioning space (t-s referring to the number of lags examined): X corresponds to a vector of control variables that are supposedly exogenous (e.g., age, gender, and region). β is a matrix containing the main coefficients of interest. The coefficients in γ relate to the control variables and ε corresponds to the usual residual error term. Put differently, each of the main variables has a turn at being the dependent variable, with lags of all main variables among the independent variables. Each variable is seen as a function of lagged values of itself and each other variable.

While the researcher needs to be guided by theory in selecting these resources, conversion factors, and functionings, the technique does not necessitate the assumption of specific causal relationships. Although such a focus on intertemporal associations is similar in spirit to "Granger causality," it cannot guarantee the true causal nature of the relationships between the variables. In macroeconomic applications of VARs, a precise understanding of the causal relations between variables is required to ensure that an exogenous policy shock to one variable will have the expected effects on other variables. Using a set of "basic functionings" (Sen, 1993), comprising "being happy," "being healthy," "being nourished," "moving about freely,"

"being well- sheltered" and "having satisfying social relations" and income as proxy for "material well-being," the following relationships were found for the case of Great Britain (Binder & Coad, 2011): Income is not only a resource but also a functioning that benefits from positive changes in other functionings, for example, "being happy," turning the latter effectively into a resource for the former. Being a resource, happiness positively influences health, food, and mobility functionings (and to some extent also income). On the other hand, there are also functionings that stand more isolated in the analysis, namely, "being well-sheltered" and "having satisfying social relations." Since these functionings are less interconnected with other functionings, they can be more easily analyzed independently of their interactions with other variables. It is important to be aware of these intertemporal interactions between resources and functionings in the capability framework in order to better understand the multiple dimensions of human well-being and their coevolution over time.

In sum, while the capability approach is an eloquently elaborated welfare framework that looks very appealing on first sight, the empirical operationalization of the approach poses several not yet fully satisfyingly answered challenges for the researcher that need further scrutiny.

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Capital Assets

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Definition

Refers to all types of resources acquired and held by an entity used in its operations and that have useful lives of more than 1 fiscal year (Comptroller, 2012; Dasgupta, 2008).

Description

Capital assets may be tangible capital assets (assets with a physical substance) or intangible capital assets (capital assets without a physical substance), acquired by the entity not for immediate resale but to be used in the business for a period exceeding 1 financial year (CAFR, 2011). They are sometimes referred to as fixed assets (Dasgupta, 2008). Fixed assets are assets used by an entity in the production of goods and services for a period exceeding 1 year (Scotland, 2012).

Capital assets differ from other assets in the sense that (i) they are expensive, (ii) they are not acquired with an intention to be sold, (iii) they have an economic life of more than 1 fiscal year, and (iv) they are used in the production of other goods and services.

Tangible and Intangible Capital Assets

Tangible capital assets generally occur in the form of physical substances that can be seen and/or touched. Examples of tangible capital assets include land and buildings, furniture and fittings, plant and machinery, equipment, roads, minerals, motor vehicles, and computers (CAFR, 2011; Dasgupta, 2008). In contrast, intangible capital assets are assets held by an entity that lacks physical substance – you cannot see or even touch them, but they have value, and their useful life extends beyond a fiscal year (CAFR, 2011). Examples of intangible capital assets include computer software, patents, trademarks, water rights, copyrights, and other long-term intellectual rights.

In contrast to capital (fixed) assets, current assets have expected life of less than a year (Treasury, 1991). In merchandising entities, current assets are money or near-money items or items likely to be converted into cash in 1 financial year. They include cash and bank balances, receivables, prepayments, and inventories of goods and other consumables used in day-to-day operations of the entity business.

When an Asset Does Become a Capital Asset?

There is no universally agreed line of demarcation between capital assets and consumable items. The decision to categorize an item as a capital asset or a consumable depends on the size of the entity in question. For example, while an item worth $200 might constitute a capital asset in a small business, in big international conglomerates, it may be categorized as a consumable (Team, 2004). However, individual organizations have established price limits at which an item becomes a capital asset.

Useful Life of a Capital Asset

This is the time interval during which the asset is expected to be useful to an organization (Team, 2004). The useful life of assets differs from one asset to another and from one entity to another. The asset undergoes a decline in its value (depreciation) due to wear and tear, aging, obsolescence, and damage during its useful life (Treasury, 1991). However, as a matter of prudence, organizations must provide for the depreciation which is the charge for the using up of private and government fixed assets and consumer durables (U.S., 2003).

Cross-References

▶ Built Environment
▶ Capital Gains

- ▶ Consumption
- ▶ Economic and Financial Literacy
- ▶ Economic Growth
- ▶ Economic Value
- ▶ Financial Capital
- ▶ Monetary Measures of Value

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Capital Budgeting Method

- ▶ Project Evaluation

Capital Gains

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Definition

Capital gain refers to an increase in value of ▶ capital assets. Normally, the gain is realized upon disposing (selling) the asset by comparing the disposal price and the purchase price.

Description

Capital gains arise from owning and selling capital assets (either for personal use or investment), such as a house, stocks, or bonds. Therefore, capital gain or loss is basically the difference between the basis in the asset and the selling proceedings. Generally an asset's basis is its cost, except when an asset was received as a gift or inheritance where the asset basis will depend of the legal provisions of a specific country.

Usually, capital gains are calculated for determining taxable income. Hence, capital losses are not tax deductible. Moreover, capital gains and losses tend to be categorized as long term or short term. Thus, long-term capital gain or loss occurs when an asset is held for more than 1 year before disposal, while short-term capital gains or loss occurs when an asset is held for 1 year or less before disposal.

Different countries have different ways of treating capital gains for tax purposes. In 2008, the American Council for Capital Formation compares capital gain taxes globally as follows: USA (15 %); ▶ Japan (7 %); ▶ Italy (12.5 %), ▶ Singapore, Thailand, Netherlands, ▶ Mexico, and ▶ Germany (0 %); ▶ Denmark (45 %); Sweden (30 %); and ▶ UK (18 %). In ▶ Australia, if you make a capital loss, you cannot claim it against income, but you can use it to reduce a capital gain in the same income year. If your capital losses exceed your capital gains or you make a capital loss in an income year, you don't have a capital gain; you can generally carry the loss forward and deduct it against capital gains in future years. In the USA, the tax rates that apply to net capital gain are generally lower than the tax rates that apply to other income.

Capital gain taxes may lead to incentive or disincentive to saving and investing depending on the degree of tax burden (Protopapadakis, 1983;

Poterba & Weisbenner, 1998). In particular, Keuschnigg and Nielsen (2004) show that capital gain taxes tend to discourage ▶ entrepreneurship efforts and capital venture support in some American and European countries. Moreover, capital gain tax in the United States can be avoided upon death, thereby creating a lock-in effect by discouraging investors from selling appreciated assets (Meade, 1990). Empirical evidences provide mixed and debatable economic implications of reducing capital gain tax. Whereas some studies suggest that cutting capital gain tax would stimulate ▶ economic growth by increasing ▶ GNP, other studies refute (Pierce, Fracis, & Snyder, 1990).

Cross-References

▶ Financial Capital

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Capital, Social

▶ Relational Goods

Car Ownership

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Synonyms

Vehicle ownership

Definition

Car ownership in the USA is achieved primarily through purchase and lease. Purchasing a vehicle is usually done through 3-, 4-, and 5-year loans at market-determined rates of interest. To increase sales and market share, manufacturers often provide low-interest loans. A big secondary market in used cars exists. Many people and businesses, especially those who want a new car every year and/or get a tax depreciation write-off for cars, use leases. There is a growing use of temporary, as-needed, local rentals, such as Zip Cars. These services are used by those who do not own cars. Standard rental car companies, on the other hand, are used primarily by those who already own cars but must travel on business or for other reasons to remote locations.

Description

The United States ranks very high internationally in per capita percent of car ownership. These figures are not universal across all racial and ethnic groups. For example, African-Americans own cars at the lowest rate of any demographic group. This can create severe problems, such as the inability of African-Americans to evacuate New Orleans before Hurricane Katrina in 2005. The city's evacuation plans were based on the use of private vehicles. One of the variables now

commonly included in indices of disadvantage is households that do not have a car. It has been estimated that "raising minority car-ownership rates to the white car ownership rate would eliminate 45 % of the black-white employment rate differential and 17 % of the comparable Latino-white differential" (Raphael and Stoll, 2001).

There are also differences in car ownership treatment by gender. For example, women pay higher interest rates on car loans and cease drive in old age sooner than older men.

Since the 1920s, the car has come to symbolize and actualize independence, mobility, and freedom of movement in the USA. In other countries such as China, car ownership has become aspiration and a signifier of having arrived in the middle class. Car ownership to some extent reflects landforms, in that, for example, the USA is a large country. The car replaced the horse and carriage and enabled much speedier transportation. It also created the necessity for paved all-weather roads.

Cars have become "the quintessential manufactured object produced by the leading industrial sectors and the iconic firms within twentieth century capitalism" (Urry, 1999).

Car ownership can be distinguished from car usage. Some families, especially the rich and middle class, have more than one car, or even more than two cars, and thus the usage for each is not high.

When we say "car ownership," we include pickup trucks, which are the best-selling vehicles in the USA. Cars come in many different types, sizes, and performance characteristics. The current challenge is to increase miles per gallon, to save money and fuel, and reduce pollution. To some extent, car ownership can be distinguished from motorcycle ownership.

The car has been closely aligned with other social change (Ellaway, et al., 2003). For example, cars contributed to the social phenomenon known as "white flight." This was the physical movement of white families from the cities of America to the suburbs, primarily after World War II. The movement was made possible by the financial benefits of Veterans Administration housing funding (the "VA loan") for returning soldiers from World War II, by the newly constructed Eisenhower freeway system, and by the construction of segregated (de facto and de jure) housing developments. White flight resulted in the "hollowing out" of inner cities, and increased housing segregation, as African-Americans were left behind in the cities. White flight also increased educational segregation, since the suburban schools were much more white than the city schools. Additional white flight was brought about by unscrupulous real-estate agents and brokers, who created fear among whites that neighborhoods were becoming less valuable and more dangerous because of African-Americans moving in. Physical barriers such as inaccessible structures and freeways between neighborhoods can lead to segregation and to lack of inclusion. "At the same time we were doing Brown v. Board of Education and trying to integrate the school system," says Angela Glover Blackwell, the head of PolicyLink, "we were investing billions of dollars in a highway system that segregated the nation by allowing people to be able to run away from urban areas that were integrated to suburban areas that were all white." "The 1925 and later 1956 Federal Highway Acts facilitated the federal control, organization, and funding of nation-wide road development. Prior to these acts many roads were impassable, or very poorly maintained. A nationally coordinated numbering system was put into place and after 1956 billions of dollars were earmarked to fund the asphalt and concrete paving of a new highway system. Today we have over four million miles of roads that require tens of billions per year in construction and maintenance costs. . .car ownership increased dramatically once the roads were built. The number of cars owned tripled between 1960 and 2000 and these cars facilitated the commuting trends into the suburbs" (Paul Cheney; Intro to Sociology; 2009; http://freebooks.uvu.edu/SOC1010/index.php/ch18-urbanization.html).

"Suburbanization in the U.S. between 1910 and 1970 was concurrent with the diffusion of the automobile. . . a number of driving forces of suburbanization and car adoption, including

falling automobile prices, rising real incomes, changing costs of traveling by car and with public transportation, and urban population growth. According to the model, 60 percent of postwar (1940-1970) suburbanization can be explained by these factors. Rising real incomes and falling automobile prices are shown to be the key drivers of suburbanization" (Kopecky and Suen, 2004). Environmentalists commonly believe that too much has been sacrificed and given over to cars, in the form of paving and creating impermeable surfaces, with all the consequent externalities, and in devoting space to parking. They want to reduce car ownership, or at least car usage. Environmentalists believe that current car ownership is not sustainable.

Car ownership has social implications such as isolation stemming from people spending a great deal of time alone in their cars (Johnson, et al., 2008). It has created a psychology, including concepts like "road rage." Car ownership encouraged beatniks and literature, such as Jack Kerouac's novel, On the Road, and other road literature such as John Steinbeck's Travels with Charlie, William Least Heat Moon's Blue Highways, and Robert Pirsig's Motorcycle Maintenance. Car ownership creates the freedom of the road, which reflects and enhances American freedom generally, or at least its self-regard of freedom.

Extensive car ownership has created a public health problem in the form of deaths and injuries from car crashes. With the advent of air bags and other safety features of cars, more people are surviving car crashes. However, there are increased lower body injuries. Causes of car crashes include drunk driving and distracted driving. The former has led to big efforts to combat it, including the formation of groups such as Mothers Against Drunk Driving, public campaigns such as designated drivers, police efforts such as traffic checkpoints and stops, and increased punishments. Less emphasized today are the health-enhancing aspects of car ownership, such as increasing access to healthy food and to medical facilities. "It has consistently been shown in the UK that those living in households with access to a car have lower mortality rates than those without household car access. It has usually been inferred from this that car ownership is a good marker of material living standards, and it has therefore been incorporated in several measures of area deprivation. It is often used in epidemiological studies as a measure of socioeconomic status in the absence of good data on income or occupational social class" (Ellaway).

Cars were thought to have contributed to the sexual freedom revolution in the USA, because young people could find a "third place" to be away from prying eyes.

Broad car ownership has helped turn the USA into a global power and debtor, in that, for example, every year the USA sends $700 billion to Saudi Arabia to buy oil for gasoline. So even though cars may drive in the USA, they make it impossible for the country to be isolationist.

Twenty-six percent of low-income households have no car, compared to just 4 % of other households (Federal Highway Administration, National Personal Transportation Survey, 1995). A 1980 study found an even more startling disparity that only 22 % of food stamp recipients drove their own car to shop for food, compared to 96 % of nonfood stamp recipients (Paul Nelson, James Zellner, "Store Selection by Food Stamp Household," *National Food Review*, Summer 1980). Low-income households are 6–7 times more likely than other US households to not own cars.

According to US Census 2005 data, 55.1 % of occupied housing units in New York City do not keep a vehicle available at home for personal use (U.S. Census, *County and City Data Book: 2007*, 14th edition). The only other cities with at least a third of households not having a vehicle are also in the Northeast Corridor: Washington, DC, Boston, and Philadelphia.

Currently, young people in the USA are starting to drive at higher ages and are purchasing cars less. The cost of private cars, including purchase, insurance, operations, and maintenance, has become prohibitively high. Graduated licensing systems and onerous rules have made it more difficult to obtain and keep a driver's license at a young age.

Cross-References

- ▶ Mobility
- ▶ Transportation and the Quality of Life

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Cardiac Rehabilitation

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Synonyms

Secondary prevention programs, cardiac care

Definition

Cardiac rehabilitation (CR) programs typically involve ▶ exercise, patient education and advice, relaxation, drug therapy, and counselling and support strategies that are aimed at targeting modifiable risk factors (Jolly et al., 2007).

Description

Cardiac rehabilitation (CR) enables people with coronary heart disease (CHD) to have the best possible help (physical, psychological, and social) to preserve or resume their optimal functioning in society (National Institute for Health and Clinical Excellence [NICE], 2008). Therefore, ▶ quality of life (QoL) measures are an important aspect of measuring the success of CR and could be considered as one of the major goals (Shephard & Franklin, 2001), with the ideal outcome being that the individual achieves the usual levels of QoL for the individual's age and condition. In a health-related context where perceived well-being is being sought, the term "health-related quality of life" (HRQoL) is usually applied. HRQoL represents a patient's perceptions or subjective evaluation of the impact of disease on their functional status and well-being. There is a large evidence base for using HRQoL in CR with positive improvements reported in most studies. According to the National Audit of Cardiac Rehabilitation ([NACR], 2011) CR patients show significant improvements in HRQoL with the greatest gains in physical fitness, overall ▶ health, and participation in social and daily activities. Furthermore, the NACR also reported that being free of negative psychological factors such as ▶ anxiety and depression was an important aspect of HRQoL; before beginning CR, 30 % of patients were borderline or clinically anxious and 17 % borderline or clinically depressed. However, after CR patients had statistically significant improvement in both levels of anxiety and depression. The only aspect that did not improve after CR was levels of ▶ social support which showed an overall reduction, and this was most likely because people became less dependent on the help of others. Increases in

HRQoL in CR programs were also reported by Riaz, Syed, O'Reilly, Giffney, and Morrissey (2009) who investigated CR programs on HRQoL using the short form 36 (SF36) questionnaire. Significant improvements in HRQoL in this study were particularly due to increases in physical health and well-being scores and not mental capacity.

Duration and Long-Term Effects of Cardiac Rehabilitation on QoL

The evidence is less clear on the optimal duration to receive HRQoL benefits in CR programs. For instance, Grima, Garcia, Luengo, and Leon (2011) reported that the duration of CR was significantly related to benefits patients received. However, Leung et al. (2011) assessed HRQoL of patients who attended CR for more or less than 6 months versus patients who did not attend a CR program. The authors reported that patients who attended CR programs regardless of its duration had an improved activity status and HRQoL when compared to those who did not attend CR. Yohannes, Doherty, Bundy, and Yalfani (2010) investigated the long-term benefits of a 6-week CR program, reporting that patients HRQoL, physical activity status, anxiety, and depression all improved and improvements were maintained at 12-month follow-up. Long-term changes were also examined by McKee (2009) who measured HRQoL at the beginning of CR, at the end, and 6 months later. McKee reported significant improvements in physical functioning, ▶ pain, and general health perceptions at the end of the program when compared to the beginning of the program. There was no further significant change between the end of program and 6 months later, but HRQoL did remain significantly better than at the beginning of the program. However, patients still had significant deficits in physical and emotional factors, suggesting that CR programs need to identify individuals with these shortfalls and focus and tailor programs to meet these individualized needs.

Home-Based Versus Center-Based Programs

There has been a considerable amount of evidence relating to HRQoL outcomes between home-based versus center-based CR programs. Taylor, Dalal, Jolly, Moxham, and Zawada (2010) conducted a systematic review and found that home-based and center-based CR appear to be equally effective in improving the clinical and HRQoL outcomes in ▶ acute myocardial infarction and revascularization patients. Dalah, Zawada, Jolly, Moxham, and Taylor (2010) reported similar results for HRQoL status for both home- and center-based CR programs. However, there was a slightly increased adherence at follow-up in home-based CR programs compared to center-based programs. This finding was similar to a subsequent systematic review conducted by Shepherd and While (2011) reporting that both physical and psychological HRQoL outcomes had comparable results in both home- and center-based CR programs. However, social well-being HRQoL outcomes seem to favor home-based CR programs.

Conclusion

There is evidence that CR programs improve HRQoL regardless of duration and that these improvements are maintained once the program is completed. HRQoL is an important outcome measure in CR programs as changes in patient's perceptions of their health status may not be observable to the clinician. Literature demonstrates that there is still need for improvement in CR programs in order to increase certain areas of HRQoL; this could be achieved by identifying an individual's specific needs and tailoring the program to address these.

Cross-References

- ▶ Acute Myocardial Infarction
- ▶ Exercise
- ▶ Health
- ▶ Physical Functioning (PF)
- ▶ Quality of Life
- ▶ Social Support

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Cardinal Ordinary Least Squares (COLS)

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Definition

This is an econometric method intended as an easy alternative to the ordered probit analysis in the context of ▶ happiness economics. It is also usable for the estimation of a more-equation model with non-diagonal covariance matrix. Then it is easier than traditional probit-type methods. This method assumes a cardinal satisfaction measure. See also ▶ Probit Ordinary Least Squares (POLS).

Description

This method is intended as an alternative to ordered probit analysis in the context of happiness economics. It stems from van Praag and Ferrer-i-Carbonell (2004). At the moment, most satisfaction questions such as the Cantril question are formulated with numerical response categories. For instance, life satisfaction may be evaluated by 0 standing for the worst situation or by 10 standing for the best situation. Then the idea is that life satisfaction is a continuous variable between 0 and 10 that depends on the specific life situation x. A life situation is defined by a number of m relevant variables $X_1,\ldots,X_m$, which assume specific values $x_1,\ldots,x_m$, shortly denoted by the m vector x. ▶ Life satisfaction is then described by a function $F(x)$ which assumes values between zero and ten or after division by ten values between zero and one. If we assume that life satisfaction V may be observed on a continuous scale, an attractive model is to assume that life satisfaction is related to explanatory variables x

according to the model $V = \mathrm{N}(\beta' x;0,1)$, where $N(.)$ stands for the standard normal distribution function. Say, for instance, that a response by respondent n is 0.6, then the corresponding quantile is denoted by $v_n = N^{-1}(0.6)$. Then we may expect according to the model that $v_n \approx \beta' x_n$ or including an error term $v_n = \beta' x_n + \varepsilon_n$. It lies at hand to apply OLS on this model.

Given the fact that almost always the value of $F(.)$ is observed in a discrete mode, we have to assume that if the response is, e.g., 0.6, it implies that the real value, if it were continuously observed, will be between 0.55 and 0.65.

If we like to stick to the OLS model, we approximate the unknown v by its conditional average

$$\bar{v}_{0.6} = E(v \mid v_{0.55} < v \leq v_{0.65}).$$

More precisely, we define border values v's, such that $\mathrm{N}(v_0) = 0.0, \mathrm{N}(v_1) = 0.05, \mathrm{N}(v_2) = 0.15, \mathrm{N}(v_3) = 0.25, \ldots, \mathrm{N}(v_{10}) = 0.95$, and $\mathrm{N}(\mathrm{v}_{11}) = 1.0$, and for each observation n, one defines

$$\bar{v}_n = E\left(v \mid v_{j_n-1} < v \leq v_{j_n}\right),$$

where j_n stands for the response of the respondent n. Then we arrive at the regression equation

$$\bar{v}_n = \beta' x_n + \beta_0 + \varepsilon_n$$

as the model equation to be estimated. It is well known that (see, e.g., Johnson and Kotz (1970) and Maddala (1983))

$$E(v \mid v_{j-1} < v \leq v_j; 0, 1) = \frac{n(v_{j-1}) - n(v_j)}{N(v_j) - N(v_{j-1})}.$$

We notice that this method, contrary to ordered probit, assumes a cardinal satisfaction concept. It is obvious that if we have reason to assume that $F(.)$ is another distribution function than the standard normal, than we may replace it by another distribution function, e.g., the logistic distribution function. Experience suggests that another specification will change the estimated values β, but not the trade-off ratios $\beta_i|\beta_j$, and we are mostly only interested in those trade-off ratios.

Cardinal Median (CM)–OLS Method

A similar even easier method, suggested and applied by van Praag and Ferrer-i-Carbonell, is the so-called cardinal median (CM)–OLS method. The difference between COLS and CM is that the approximation for the discrete observation is different. If the discrete observation is 0.6, we approximate the v by

$$\hat{v} = N^{-1}(0.6).$$

That is, we assign the median value between 0.55 and 0.65. For the extremes, we define

$$\hat{v}_0 = N^{-1}(0.025), \hat{v}_{10} = N^{-1}(0.975).$$

Experience suggests that the trade-off ratios found by both methods are strikingly similar to those found by ordered probit. The same holds for the corresponding t values.

The advantage of these methods compared to OP becomes visible when we look at generalizations of OP to more equations, e.g., panel data observations, or when estimating multi-equation models on cross-sectional data. Computation of the corresponding probit model requires calculation of multiple integrals with a complex covariance structure, while COLS and CM require only the application of classical linear multivariate models, which are not computer intensive and available in standard software.

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Cardinal Utility Function

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Synonyms

Cardinally measurable utility function

Definition

Cardinal utility functions are used in economics as numerical representations of a person's preferences. For any pair of outcomes, the numbers in a cardinal utility function contain information about both which outcome is preferred and by how much it is preferred. Cardinal utility functions are used in defining preference-based quality of life measures for use in cost-utility analysis.

Description

Economic theory assumes that people have preferences over different outcomes or states of the world. These preferences are assumed to be complete (any outcome can be compared), reflexive (any outcome is at least as good as itself), and transitive (if we prefer outcome A to outcome B, and outcome B to outcome C, we must also prefer outcome A to outcome C). By assigning a numerical value to each outcome, a utility function allows the "goodness" of each outcome to be assessed without having to consult preferences. In *ordinal utility functions*, the only information that can be extracted from the utility function with any validity is the ranking of all outcomes.

In cardinal utility functions, it is possible to extract more information, and the amount of information depends on whether or not the function defines an interval or ratio measure. In an interval measure, each unit "jump" in utility has a consistent value, so that the numbers in a cardinal utility function also give information about how much better one outcome may be to another. For example, if a preference-based quality of life measure assesses three health states as having utility scores of 0, 0.2, and 0.4, then the utility gained by moving from the first state to the second is the same as moving from the second to the third (i.e., 0.2–0 = 0.4–0.2). In health settings, stronger ratio properties are sometimes assumed (Miyamoto, Wakker, Bleichrodt, & Peters, 1988), which attribute a meaningful "zero" value to at least one outcome. As the name suggests, in ratio scales, it is meaningful to compare the relative size of outcomes, so that an outcome scored at 0.4 may be said to provide twice the utility of an outcome scored at 0.2. Cardinal utility functions on both interval and ratio scales can be multiplied by any positive number without affecting their meaning, with interval scale functions also retaining meaning when a constant is added or subtracted. Both preference-based quality of life values and quality-adjusted life years are treated as measures of cardinal utility on a ratio scale, where "dead" or states equivalent to it is given the value "0." Note that cardinal utility functions may take a negative value.

Distinction Between Types of Hedonic and Cardinally Measurable Utility Functions

While cardinal utility functions are used when assessing quality of life for use in economic evaluations, ordinal functions are more typically in other fields of economics. The earliest utility functions were assumed to be "hedonic" indices that were cardinal and represented little more than an assessment of the surplus of pleasure minus pain (Bentham, 1879). This type of utility function was favored by utilitarians, who proposed that society should aim to maximize the sum of utility accruing to all individuals. In this type of measurement, introspection was deemed sufficient to access one's own preferences and assign a weight to them. This type of

measurement underlies any utilities provided by the *visual analog scale* and certain hedonic measures of happiness, such as asking people to provide *life satisfaction* on a numerical scale. There is a general concern in economics that while people may provide responses to hedonic questions, this requires very strong assumptions about the nature of people's preferences but is supported by some commentators (Dolan & Kahneman, 2008).

The orthodox position in economics is that people have only ordinal preferences. That is, while people may validly provide information on their preferences, they are only able to provide information on the ranking of outcomes. Ordinal preferences means that any utility function that keeps the same ordering of outcomes is an equally valid way of identifying those outcomes. So, any function applied to ordinal utilities that keeps this ordering (so-called "positive monotonic" or "monotone" transformations) provides another equally valid utility function (Alchian, 1953).

This flexibility is exploited by methods such as the *standard gamble* and *time trade-off* that can be used to identify *preference-based quality of life*. In each case, the methods automatically select an (equally valid) ordinal utility function based a person's responses in which the "utility" is by design identical to the response that is provided. These responses use the chance of a treatment succeeding (standard gamble) or a period of time in full health (time trade-off), and so are measured cardinally. So, the resulting utility functions are said to be "cardinally measurable" even though the preferences might ordinal in nature (Baumol, 1958). As somewhat clumsy shorthand, these responses are often then said to be cardinal utilities.

Cross-References

- ▶ Life Satisfaction
- ▶ Preference-Based Measures of Health-Related Quality of Life
- ▶ Time Trade-Off

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Cardinally Measurable Utility Function

▶ Cardinal Utility Function

Care (or Medical Care), Satisfaction with

▶ Medical Care, Satisfaction with

Care as Comfort

▶ Quality of Life and Quality of Care: an Integrated Model

Care as QoL Support

▶ Quality of Life and Quality of Care: an Integrated Model

Care as Relating

▶ Quality of Life and Quality of Care: an Integrated Model

Care as Service

▶ Quality of Life and Quality of Care: an Integrated Model

Care by Community

▶ Community-Based Care

Care in Community

▶ Community-Based Care

Care Needs, Supportive

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Definition

Assessment of support needs and its relationship with Quality of Life.

Description

In the field of ▶ intellectual disability, the construct of "support" has taken a prominent place in the discussion of personal rights, desired personal outcomes, personal inclusion, and self-determination (Guscia et al., 2006). As discussed by Ife (2001: 78) in the context of rights and needs in service delivery systems, "one of the main criticisms of all human service professionals, is the use of their professional position to privilege their definitions over the definitions made by others." In enhancing principles as social equality and respect for the individual (Schalock, 2004, 2006), the supports paradigm challenges these privileged roles of professionals and the initial focus on individuals' deficits in a medical perspective (Thompson et al., 2002). Support is described as "resources and strategies that promote the interests and welfare of individuals that result in enhanced personal independence and productivity, greater participation in an interdependent society, increased community integration, and/or improved quality of life" (Thompson, Bryant, & Campbell, 2004: 1). Support is needed to match individual skills and demands of the environment. In the context of person-centeredness, individual-referenced outcomes will be important process and program evaluation indicators (Schalock & Bonham, 2003).

Within the supports paradigm, there is an obvious need for assessment processes that meet reliable and valid criteria regarding individual support needs. The *Supports Intensity Scale* (SIS) has been developed "as a multidimensional measure designed to determine the intensity of an adult's support needs" (Thompson et al., 2004: 79). "The instrument is designed to assess support needs, determine the intensity of needed supports, monitor progress, and evaluate outcomes. In addition, SIS results can be useful for projecting support costs and justifying access to certain types of funded services" (Thompson et al., 2004: 79). The SIS instrument is unique in its focus on practical support rather than on individual deficiencies (Thompson et al., 2004). The scale evaluates what practical support is needed to enhance participation in society. As the start of a planning process, the SIS scale offers the consumer, professionals, and family members an assessment instrument to determine goals and aspirations for the consumer. By definition, the support assessment process is inclusive and consumer-oriented (Thompson et al., 2004). Resources are community-based and as close as possible to the individual.

We examined the extent of agreement between caregivers' and consumers' perspectives on the issue of support needs as reflected in the outcomes of the SIS. If staff assessment of support needs ranks systematically higher or lower than consumer ranks, caution is warranted about the way the SIS is administered.

Despite an acceptable level of inter-respondent reliability between staff and consumers, the results demonstrated a general "overestimation" of staff support scores (Claes et al., 2009).

Since the results of the SIS can be seen as one component in a systematic planning and monitoring process to develop individualized plans, it is essential for the individual to remain central in this whole planning process (Thompson et al., 2004). Despite an excellent inter-rater reliability according to the manual of the SIS (Thompson et al., 2004), actually it is recommended to let people with ID speak for themselves. Although staff respondents may be reliable, they cannot replace self-reports. This emphasizes the strength and the rationale of the SIS instrument. Care policy and services that access support that is actually defined and directed by the consumers themselves (Powers, Sowers, & Singer, 2006) are required to facilitate individual outcomes and increase perceived quality of life. Related studies suggest the implementation of remedial programs to improve "active support" (Mansell, 2001; Smith, Felce, Jones, & Lowe, 2002).

Cross-References

▶ Intellectual Disability

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Care Services

▶ Care, Long-Term

Care, End of Life

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Synonyms

End-of-life care

Definition

The term "end-of-life care" has been used to mean (1) all health care that a person

receives during the last weeks and months with a life-limiting chronic disease, (2) terminal care in the last hours and days of life, and (3) synonymously with palliative and hospice care. The first definition is the most inclusive, distinct from other terms, reflective of emerging trends, and widely used. End of life is sometimes spelled as end-of-life, particularly when the term is used as an adjective rather than a noun.

Description

End-of-life care is a term that has emerged internationally in academic research and government reports (Carstairs, 2000; Field & Cassel, 1997; Lien Foundation, 2010; National Gold Standard Framework Centre, 2011; Palliative Care Australia, 2008). The reports feature multi-sectoral approaches to improving care for persons with life-limiting chronic disease in contrast to specialty palliative or hospice care and a traditional focus on cancer (Lorenz et al., 2005). End-of-life care reports often focus on the appropriateness of curative, hospital (Bloomer, Moss, & Cross, 2011) emergency department, and intensive care services (Nelson et al., 2006) during the time when a person's health is steadily or intermittently failing and death approaches. Improving the delivery of primary care is featured (National Association for End of Life Care, 2009) to enable access to care for increasing numbers of people at end of life given an aging population. To achieve patient-focused care, greater coordination and integration of services is advocated (Wilson et al., 2008). As major economic challenges confront national health systems, improving cost-effectiveness is paramount, as is assessing quality of care (Department of Health, 2008; Grunfeld et al., 2008) and outcomes (Lorenz et al., 2005). Beyond the widespread societal resistance to discussing death and the systemic medical mind-set of viewing death as a poor outcome, there is also resistance to the term "end of life" and thereby "end-of-life care" by people who view the death of the physical body as the beginning of a transition into a next life and thus not the end of life.

A palliative hospice "approach" or "philosophy" is increasingly being used as the language to advocate for a transfer of the goals and specialized skills of hospice and palliative care in symptom control to a wide range of health services that traditionally focused on curative, life-extending, and rehabilitative care (Thompson, McClement, & Daeninck, 2006). Palliative and hospice care are terms that have been used for a number of decades for services that highlight ▶ quality of life and supportive care over attempts at cure which are likely to be futile and at prolonging life.

End-of-life care has been used to refer to a limited time period of only the last minutes or hours of life when death is recognizably imminent, sometimes in the context of care that has not been preceded by a planned and coordinated palliative approach for symptom control and reassessing disease treatment goals (Lorenz et al., 2005; Lunney, Lynn, Foley, Lipson, & Guralnik, 2003). Bioethical issues including euthanasia and assisted suicide may be included (Special Senate Committee on Euthanasia and Assisted Suicide, 1995).

End-of-life care is a balance of palliative and curative care which shifts over time reflecting the disease trajectory of one's life-limiting illness (Lunney et al., 2003). A theme in end-of-life care reports is the need to begin earlier to plan for the possibility of death through the development of advance care plans. In contrast to end-of-life care reports, palliative and hospice care reports tend to have greater focus on bereavement and family caregiver support.

Cross-References

- ▶ Care, Palliative
- ▶ Health Care
- ▶ Hospice
- ▶ Quality of Life

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Care, Forensic

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Synonyms

Forensic care; Forensic mental health care; Forensic psychiatry

Definition

Quality of life (QoL) in (forensic) psychiatry can be considered as a multidimensional concept with objective as well as subjective indicators (see, e.g., Bouman, 2009; van Nieuwenhuizen, Schene, & Koeter, 2002). Pursuing the "good life" seems to be the most important objective of one's life (Bouman, de Ruiter, & Schene, 2008).

Description

In a recent systematic review study, Fitzpatrick and colleagues (Fitzpatrick et al., 2010) investigated which outcome measures have been used – since 1990 – in forensic mental health research. Based on the opinions of an expert panel, they

ended up with 11 different outcome indicator domains, of which recidivism was most often used. This is not surprising, as the most important goal of mental health law and allied forensic services is to protect society against offenders with serious mental disorders (see, e.g., Vandevelde et al., 2011). Besides this protectionist aspect, forensic mental health services also have to offer treatment, support, and care for the offender. This delicate balance between "treatment and control" is acknowledged by many authors (see, e.g., Adshead & Sarkar, 2005; Fitzpatrick et al., 2010). Congruent with this notion, Fitzpatrick et al.'s review (2010) indicated that clinical, rehabilitation, and humanitarian outcomes are relevant as well, which points at the importance of indicators with regard to psychological and social functioning and quality of life. Up until now, however, only a minority of studies have incorporated quality of life outcome indicators (Bouman, 2009; Fitzpatrick et al., 2010; van Nieuwenhuizen et al., 2002; Walker & Gudjonsson, 2000), both in a theoretical and in an empirical way (van Nieuwenhuizen et al., 2002).

This short contribution summarizes some key aspects with regard to the concept of quality of life in forensic psychiatry, which still is a fairly "unreclaimed territory" as van Nieuwenhuizen et al. (2002) called it in their key article on forensic QoL. First, the background and definitions of quality of life in general and forensic psychiatry will be inventoried, after which some pending issues will be listed. Further, we will shortly introduce a theoretical model developed by Bouman in 2009, and we will conclude this short article by referring to a number of recent studies which used quality of life indicators in forensic psychiatric populations. Because of the current dearth in literature about the concept of quality of life in forensic psychiatry, we have primarily based this contribution on the publications by two leading experts in the field, namely, Prof. Dr. Ch. van Nieuwenhuizen (2002) and Dr. Y. H. A. Bouman (2009). Exemplary for the limited number of scientific QoL publications in the forensic mental health field is the exploratory literature search we have conducted on the Thompson Reuters "Web of Science" database (August 2011): a query using the key words "quality of life" and "forensic psychiatry" yielded only 11 references; the keywords "quality of life" and "mentally ill offender" resulted in 8 references. In both lists, van Nieuwenhuizen and Bouman were referenced.

Bouman (2009, p. 8) indicates that the concept of QoL stems from two different origins:

1. The declaration of the American president Johnson who stated in the mid-1960s that not only economic aspects were important for the "happiness" of people; one should rather adopt a more holistic point of view involving not only objective but also subjective indicators.
2. The WHO (World Health Organization)'s definition of health – one of the indicators of QoL as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 2005, p. 1 cited in Bouman, 2009, p. 8).

According to van Nieuwenhuizen et al. (2002), the process of deinstitutionalization in psychiatry led to an increased attention for quality of life. This heightened interest in QoL within psychiatry was observed since the 1980s in the USA, UK, and Scandinavian publications, which is later than its occurrence in general medicine literature (van Nieuwenhuizen et al., 2002). The most important characteristics of QoL in general psychiatry refer to its multidimensional nature and the importance of subjective indicators (van Nieuwenhuizen et al., 2002).

With regard to QoL in forensic psychiatry, we can refer to the already mentioned dearth in studies involving this concept: outcome research seems still be primarily focused on disease-oriented indicators rather than on quality of life-related measures (cf. Bouman, 2009; Plugge, Douglas, & Fitzpatrick, 2011; van Nieuwenhuizen et al., 2002). Specifically within the context of forensic psychiatric treatment, the "good lives model" (see, e.g., Ward & Brown, 2004) seems to offer promising pathways for treating and rehabilitating offenders. It aims at "improving the offender's well-being, by focusing on his strengths and capacities" (translated from

Dutch, Pompe, 2009, p. 3). This aligns very well with the argument of Bouman (2009, p. 9) who points out that *"striving for the good life is regarded as the most important goal in life in theoretical models of QoL (…). Global Qol is related to personal characteristics, objective circumstances in various domains and subjective satisfaction with these life domains* (Lehman, 1983)."

Although we do not have enough space to elaborate on the following topics, we would like to shortly address some pending issues with regard to the concept of QoL in forensic psychiatry. These issues currently include the following, among others (cf. van Nieuwenhuizen et al., 2002; Bouman, 2009):

- The lack of QoL operationalizations
- Difficulties with regard to the measurement and assessment of QoL in mentally disordered offenders, especially forensic inpatients
- The dominance of research into risk assessment rather than into QoL-related indicators
- The lack of studies investigating the links between risk assessment, risk management, and quality of life
- Difficulties with regard to samples used in the reported studies (i.e., the studies only report on males and the type of psychiatric disorder is seldom used to sample the participants)

In this respect, we would like to focus on the recent studies carried out by Bouman (2009) in the Netherlands, investigating the relationship between quality of life and recidivism. She developed a theoretical model, involving the above-mentioned good lives model (Ward, 2002), the general strain theory (Agnew, 1992), and the social control theory (Sampson & Laub, 2005), assuming that a higher quality of life could lead to a lower chance of re-offending. The results of the study indicate "support for the assumption of the Good Lives Model that (…) if forensic patients have a good or fulfilling life the risk of (re-) offending diminishes" (Bouman, 2009, p. 152). Based on Bouman's study, this seems true for male, outpatient clients with a personality disorder or personality disorder traits. Further research is needed to investigate if this result can be replicated in other target groups as well.

To conclude this contribution, we would like to refer the interested reader to some relevant studies in the forensic psychiatric field:

- van Nieuwenhuizen et al. (2002) refer to one theoretical (Coid, 1993) and three empirical studies, among which Walker and Gudjonsson (2000), who used the ▶ Lancashire Quality of Life Profile.
- Bouman (2009) refers to a number of studies both in inpatient (see, e.g., Long et al., 2008; Saloppé & Pham, 2007) and in outpatient forensic populations (see, e.g., Gerber et al., 2003; Swanson, Swartz, Elbogen, Wagner, & Burns, 2003).

Cross-References

▶ General Strain Theory and Violence
▶ Lancashire Quality of Life Profile
▶ Social Control Theory and Violence

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Care, Foster

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Synonyms

Family foster care; Foster care; Kinship foster care; Substitute or alternative care

Definition

Foster care is a form of provision for children in public care or within the child protection system according to the legal framework of each country. Broadly speaking, this provision refers to a person or a family that takes care of a child, or children, for a limited period of time. Generally, children remain in foster care while their families of origin are making efforts to overcome the difficulties that led them to abuse or neglect the child. Afterwards, they can be safely reunited with their own families. On the other hand, children may also be placed in foster care while waiting for a permanent placement, for example, an adoption, when they cannot return to their family of origin.

Foster carers/caregivers are generally recruited by both state services and the independent sector, and they usually undergo some sort of training. Foster parents are usually supervised by social services while they are fostering the child in order to help them as well as to control the quality of the placement where the child is living.

Description

There is a wide range of variations concerning the meaning of the term among different countries (Colton & Williams, 1997) depending on their legal framework and historical background. This takes into account the relevant legal measures, the target population, and the type of

reward given to foster parents, each of which has the common aim of avoiding suffering and improving children's quality of life. In some countries the term "foster care" includes both kinship foster care (children placed within their own extended family) and non-related foster care. In addition, in some countries it can include children's residential homes. Depending on the country, foster care can occur only with the agreement of the biological parents or by the children themselves. In others, the consent of the biological family is not necessary. In some countries foster care is the result of a court decision; in others, it requires only administrative measures. There are also differences in the characteristics of the children placed, for example, they may come from abused or neglected family situations. On the other hand, they may be placed due to severe behavioral problems, and in some countries they may also be referred from the juvenile justice system. In some cases, foster carers are undertaken the task on a volunteering basis, while others are paid for the job they do.

Depending on the purpose, fostering can take various forms. The spectrum is wide – from family upbringing to the fulfillment of a treatment program. By the same token, the time span can range from respite and short-term care to longer term and permanency. Finally, in most countries children and adolescents can remain in foster care up till the age of 18, but in others it can be extended beyond the age of majority.

Discussion

From the **perspective of quality of life studies**, a number of issues related to foster care need to be discussed and remain as challenges.

One of these key issues is **the involvement of all social agents** both from the point of view of practice and research. Only a few studies cover the different perspectives at the same time (Montserrat & Casas, 2007). The main social agents directly concerned with this phenomenon are the children themselves, the families of origin, the foster parents, the practitioners, the policy service managers, and the researchers. In practice, not all children and young people are always heard and involved in the decision-making process (Sinclair, Baker, Wilson, & Gibbs, 2005; Berridge, 1997; Ward, Skuse, & Munro, 2005; Jackson & Sachedev, 2001) – the same applies to foster carers. It is critically important to take into account all decisions which have a direct effect on their lives, especially within the context of quality of life studies. **Listening to the interested parties – foster children, caregivers, and practitioners** – is a first necessary step to understand and to improve the personal well-being of the people involved. Where children are concerned (Biehal & Rees, 2010; Sinclair et al., 2005, Ward et al., 2005), this issue is related directly to their rights (the right to be heard and to participate), to the need to implement child-friendly services, and, at the end, to promote resilience.

Little is known about the **satisfaction on life that children and adolescents** have while they are in foster care and after they leave it (Wilson & Conroy, 1999; Montserrat, 2012; Montserrat & Casas, 2007). For this reason there are some key issues related to their well-being that should be highlighted both in research and practice. One of them is the pursuit of greater **stability**. For instance, most authors point out that numerous changes of placements and schools are harmful to children in care (Sinclair et al., 2005; Ward et al., 2005; Chase, Simon, & Jackson, 2006).

An equally important aspect is **the priority that should be given to their education** (Jackson & Sachedev, 2001). In general, their life in school and their satisfaction with it constitutes a major issue for children (Frederick & Goddard, 2010). The lack of education of many children in care leads them to be more at risk of social exclusion while in and especially after care. Many studies indicate that they suffer higher rates of emotional, social, behavioral, and educational problems compared to the general population (Rutter, 2000; Chase et al., 2006).

Regarding the well-being of children in care, three other vital aspects include the presence of **key stable adults** in their lives, the need for some **perception of self-control** over their own lives, and higher **expectations** on the part of adults

towards children in care (Montserrat, 2012). How **to avoid the stigmatization** process they usually suffer due to their care background is still a challenge for the care systems and crucial for their well-being, too. Finally, how to address the nature of the **relationships with their families** of origin continues to be a sensitive area and one which is difficult to assess (Shlonsky & Berrick, 2001). This latter is dramatically important in children's lives.

Turning to **post-care services**, these are crucial for the needs of young people leaving care, and the lack of such services may lead them to high risk situations (Stein & Munro, 2008; Jackson & Sachedev, 2001).

Looking at the increasing use of **kinship foster care** within the child protection systems, recent studies have revealed some positive outcomes while children are in care and when they leave it. Nevertheless, the need of an adequate support is important to improve their quality of life of fostered children (Farmer & Moyers, 2008, Broad, 2001; Hegar & Scannapieco, 1999; Del Valle, López, Montserrat, & Bravo, 2009, Montserrat, 2012).

The increasing need of more **professionalism regarding foster carers** is another relevant issue for these sorts of placements (Boddy, Statham, McQuail, Petrie, & Owen, 2009). Demographic changes in society such as women entering into the labor market make the recruitment of new foster carers – and their permanency – difficult in some countries. The debate embraces the pros and cons of having a well-paid job as a foster carer, and the impact for instance of working in their own home or going on holidays with or without the fostered child and how these issues affect the quality of life of children and caregivers.

Furthermore, limited resources mean that **practitioners and service managers** are frequently understaffed and working under pressure. These issues have effects on the quality of services associated with fostering, for example, the existence of waiting lists, the sudden decisions related to family reunification, or too many changes for children. Other impacts are the insufficient treatment of the families of origin, the lack of support to foster parents, or the (dis)satisfaction of practitioners. On the other hand, services have been greatly improved over recent years on aspects such as coordination, professionalism data collection, and the design of programs, but still more efforts must be made (Kelly & Gilligan, 2002; Wulczyn, Orlebeke, & Haight, 2009). The feedback between professionals and researchers is rarely fluent, and improvements in training on how to assess foster care placements are often required (Shlonsky & Berrick, 2001).

Research on foster care faces important challenges when focusing on children's and adolescents' well-being (Shlonsky & Berrick, 2001; Kelly & Gilligan, 2002). One of the main obstacles is being able to attribute specific outcomes to fostering, owing to the confluence of a multiplicity of factors before, during, and after care. Even figures related to breakdowns in foster care vary enormously, depending on the type of studies and analysis. This embraces the issue of the best methodological approach to be used, considering both quantitative and qualitative data collection procedures, the need to increase the number of longitudinal studies, and the need to include the perspective of all social agents involved.

Cross-References

- ▶ At-Risk Children
- ▶ Care, Residential
- ▶ Child Maltreatment: Neglect
- ▶ Child Maltreatment: Physical Abuse
- ▶ Child Maltreatment: Psychological Maltreatment
- ▶ Child Maltreatment: Sexual Abuse
- ▶ Domestic Violence
- ▶ Grandparenting

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International Foster Care Organisation. http://www.ifco.info/
The fostering network. http://www.fostering.net/

Care, Long-Term

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Synonyms

Care services; Community care; Home care; Nursing homes

Definition

Long-term care typically refers to a system of care services that are ongoing and indefinite, provided for people who are no longer able to care for themselves (Banerjee, 2009). Long-term care can range from home and community care to residential care. Long-term care homes (LTCHs) refer to facilities that are designed to assist people living there with activities of daily living and other tasks that they are no longer able to do for themselves, also called nursing homes.

Description

Long-term care can occur in a variety of settings, including home, community, and residential care. Services provided in the home can include personal assistance (such as bathing or toileting),

nursing services, and specialized services such as physical or occupational therapy and speech language therapy. Other services that can also be provided can include more general tasks that may be required to remain in the home, such as cooking, cleaning, laundry, grocery shopping, banking, and home repairs, among other things. Community care services can include services such as adult day programs, day hospital programs, accessible transportation services, meals on wheels, and leisure programs (Baranek, Deber, & Williams, 2004). Residential care can include seniors' apartments, assisted-living homes, retirement homes, and long-term care homes.

Long-term care historically has been provided through informal means, such as family support, community support, and charitable organizations (Hutchison & McGill, 1998). Throughout the 1800s, however, people who could not care for themselves, including people with disabilities, mental illnesses, and seniors, were placed in asylums, hospitals, and prisons (Hutchison & McGill, 1998). Today, institutions are typically viewed as a "last resort" for people with disabilities, and these institutions include long-term care homes (or nursing homes), acute and chronic care hospitals, and rehabilitation settings (Hutchison & McGill, 1998). The focus of care is now in the home and community, where it is widely recognized that quality of life is better for people being supported in their own homes and communities than in institutions, and is viewed as being more cost-effective (Baranek et al., 2004).

Funding systems for long-term care services typically differ from country to country. Some countries provide public services, meaning that the employees are civil servants and the costs of the services are born by public funds through taxes. Other countries provide publicly funded services, meaning that the services themselves may be provided through private providers, either for-profit or not-for-profit providers, with public funds. Yet other countries provide private services, where individuals themselves are responsible for the costs either out of pocket or through private insurance with private providers. In many cases, a combination of the above models is used.

Quality of life has typically been conceptualized in a variety of ways in long-term care, including objective aspects such as health and functional status and socioeconomic status, as well as subjective definitions such as life satisfaction, self-esteem, and psychological well-being (Bond & Corner, 2004). Other traditional aspects of quality of life are also implicated in long-term care, including social support networks and social isolation (Bond & Corner, 2004; Victor, Scambler, Bond, & Bowling, 2000). However, other contributors to quality of life in long-term care include place of residence and quality of care and support. Extensive research has supported these areas as significant contributing factors to overall quality of life.

Quality of life has also often been attributed to place of residence. The move towards providing care in the home rather than in institutions has been motivated in part by assumptions that quality of life is enhanced when individuals are able to remain in their homes (Baranek et al., 2004). Aging in place has become a common term, and research has suggested that many people, particularly older adults, wish to remain in their homes rather than being relocated to an institution (Soodeen, Gregory, & Bond, 2007). Because people become attached to places, particularly home, and because home is often attributed with meanings of security, safety, a sense of identity and belonging, and family (Dobbs, 2004; Groger, 1995; Rowles, 1987), place disruption (Rowles, 1987), in this case moving from one's home and community into a long-term care home, can be extremely difficult for individuals (Brown & Perkins, 1992; Groger, 1995).

Significant research has documented the issues in quality of care and quality of life in institutional residences and in home care. Residents have been seen to be "bed-and-body work" (Gubrium, 1975), and their psychosocial well-being is often neglected (Diamond, 1992; Gubrium, 1975). The structures of the institution have also placed the emphasis on physical care and routines of the institution (Wiersma & Dupuis, 2010). However, if the quality of care is good in a residential facility, nursing homes are thought to be a good option and offer a better

quality of life than remaining in one's own home (Schoenberg & Coward, 1997). Many quality of care issues can be related to lack of staff and a lack of time to spend with residents (Diamond, 1992; Gubrium, 1975; Wiersma, 2010). In home care, issues of a lack of time and staff also occur (Smale & Dupuis, 2004). People using home care, however, have referred to home care as giving them a sense of security as they are able to remain in their homes (Soodeen et al., 2007).

Cross-References

- ▶ Activities of Daily Living (ADL)
- ▶ Attitudes Towards Aging
- ▶ Caregiving, Family
- ▶ Care, Residential
- ▶ Dementia Quality of Life Instrument
- ▶ Family Support
- ▶ Housing and Aging
- ▶ Late-life Adaptation
- ▶ Nursing Home Residents
- ▶ Objective Quality of Life
- ▶ Old Age, Quality of Life
- ▶ Social Inclusion
- ▶ Social Participation
- ▶ Social Support
- ▶ Subjective Indicators of Well-Being

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Care, Palliative

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Synonyms

End of life comfort care; Hospice care

Definition

Palliative care is both a philosophy and approach to care and an emerging medical and nursing

subspecialty that delivers a specialized and multidisciplinary form of care to people with complex care needs that are facing the end of life. The goal of palliative care does not focus on curative treatment, but rather aims to improve the ▶ quality of life for people living with chronic illness or life-limiting conditions. Palliative care promotes the provision of pain control and control of other physical symptoms to promote physical comfort for patients of all ages throughout the course of their illness, in addition to offering psychological, social, and spiritual support for patients and their families.

Description

The word "palliative" derives from the Late Latin word, *palliare*, which means to "cover up or conceal" and from Latin *pallium* "to cloak" (Victoria Hospice Society, 2011). In the context of palliative care, *palliate* entails reducing the intensity of a disease and easing the symptoms and pain of the illness without curing the underlying disease (Kramer, 2008).

The term "palliative care" originated with Dr. Balfour Mount, who established one of the first hospices in ▶ Canada in 1975 at the Royal Victoria Hospital in Montreal, Québec (Victoria Hospice Society, 2011). Rather than use the word "hospice," which at that time implied destitution and poverty, he chose the term "palliative care" (*soins palliatif* in French), which was promptly adopted in Canada and soon applied as an international usage (Victoria Hospice Society, 2011). In Québec, the word *maison* (home) is also sometimes used to denote palliative care.

Although definitions vary, there is general agreement that the focus of palliative care is to improve the quality of life of people living with a life-limiting illness without attempting to cure the disease. As a philosophy of care, it replaces the medical model of generic service delivery with person-centered, family-focused holistic care provided through an integrated continual care model (Bonebrake et al., 2010). Adopting this focus, palliative care supplies a combination of health, social, and supportive services which include pain and disease management; psychological, emotional, and spiritual support for patients and their families; home care and home support; and support to family caregivers throughout the course of their family member's illness and during ▶ bereavement (Health Canada, 2009; Parliamentary Committee on Palliative and Compassionate Care [PCPCC], 2011).

Hospice and palliative care come from the same philosophy of care, but unlike the focus of hospice care, which is specifically on care at the end of life, palliative care can also be applied at different stages of an illness "in conjunction with other therapies that are intended to prolong life, such as chemotherapy or radiation therapy and manage distressing clinical complications" (World Health Organization [WHO], 2011).

Palliative care is often referred to as an *approach* to care and as *holistic* care. Both the World Health Organization (WHO) and Health Canada view palliative care as an *approach* to care. The WHO (2011) defines palliative care "as an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychological, and spiritual." Health Canada (2009) provides the following definition: "Palliative care is an approach to care for people living with a life-threatening illness, no matter how old they are. The focus is on achieving comfort and ensuring respect for the person nearing death and maximizing the quality of life for the patient, family, and loved ones."

The UK National Council for Palliative Care (2011) provides an example of a *holistic* approach to care: "Palliative care is the active holistic care of patients with advanced progressive illness. Management of pain and other symptoms and provision of psychological, social, and spiritual support is paramount. The goal of palliative care is achievement of the best quality of life for patients and their families. Many aspects of palliative care

are also applicable earlier in the course of the illness in conjunction with other treatments."

Hospitals, long-term care facilities, hospices, and private residences all provide settings for the provision of palliative care. The accessibility of palliative care and hospice, however, varies by country, and within Canada, by province. In the USA, for example, there are clear funding restrictions regarding hospice care. In order to receive the Medicare Hospice Benefit, two physicians must certify that the person requesting hospice care has a life expectancy of 6 months or less and the patient in question has agreed to palliative care treatment (Centre for Medical Advocacy, 2011). On the other hand, American palliative care programs outside of hospice have no restrictions on the prognosis of the illness, so that curative treatment may also be given with palliative treatment (Kramer, 2008).

In Canada, the availability and quality of palliative care varies considerably on a provincial level, as well as within cities. For example, some sections of Montreal and the Greater Toronto area have specialized palliative care services, while other areas remain without any palliative care options (PCPCC, 2011). In smaller cities, towns, and rural areas of Canada, the variability or amount of accessible palliative care is even more unreliable, with many areas lacking any palliative care services at all (PCPCC, 2011). In fact, according to a November 2011 parliamentary committee report on palliative and compassionate care: "Canada is not providing adequate palliative and end-of-life care for all who need it. Depending on where you live, only 16–30 % of those who need it receive palliative care" (p. 7).

Cross-References

- ▶ Bereavement
- ▶ Canada, Quality of Life
- ▶ Care, End of Life
- ▶ Care, Long-Term
- ▶ Caregiving, Family
- ▶ Hospice
- ▶ Pain

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Care, Residential

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Synonyms

Communities, supportive; Family care; Foster care; Group homes; Independent living support;

Institutions; Intentional communities care; Large congregate care; Nursing care; Small congregate care

Definition

In all societies, a great many people require special care beyond that which is normally provided by themselves or their families. Effective residential care, in such cases, takes two forms: (1) providing care within people's homes to help them continue to live there, and (2) providing them with a place to live that has the supports they need. Although people of all ages and living circumstances may require either of these types of residential care, three population groups to which this particularly applies are children who need care outside their family homes or special care within their family homes, people with disabilities, and seniors.

Quality of life in residential care refers to the degree to which – for those who require special care – the residence is effective in satisfying a person's needs, the degree to which it satisfies and enhances personal and social well-being, and the degree to which it contributes to personal fulfillment.

Description

Quality of Life and Residential Care

The quality of life we all experience is very much affected by where we live, the people who share our living space, and what goes on there as part of our daily living. For people who require at least some degree of care, this is especially the case because that care is part of the residential living environment and because they typically spend more time in their homes than those who do not require special care. Although many different types of humans require special care, three stand out: children, adults with disabilities (thought of in its broad sense), and seniors. Thus, the quality of life as it relates to residential care for these three groups warrants particular attention.

The discussion that follows is not organized around these three groups of people because the knowledge that has emerged from research and practice is not, for the most part, organized in that way. Rather, reference is made to them whenever possible and relevant, and the reader is asked not only to keep them in mind when understanding the material presented below but also to consider other specific groups of people in which the reader has a particular interest to ascertain how the ideas here might apply to them.

We begin with a discussion of the looming legacy of institutions because it is essential that we understand where we came from if we are to understand our present approach to residential care clearly. Next, we look briefly at several different types of residential care that exist today, followed by a discussion of what the research literature has uncovered about quality of life in many of these types of residential care. The final section of the discussion provides some general guidance – by a simple three-phase model – for improving quality of life of individuals and groups of individuals in residential care.

The Looming Legacy of Institutions

During much of the nineteenth and twentieth centuries, many types of large institutions were built throughout Europe, North America, and elsewhere to house people who were marginalized from general society. For children without parents or who were not able to be cared for by their own families, there were orphanages. The poor were housed in almshouses, workhouses, and poorhouses of many types. Those with severe mental illness were locked in asylums, and elderly people without means were grouped in large and small "homes" for aged people. Institutions housed people whom we now describe as having intellectual disabilities; people with mental illness; people, especially unwed mothers, who were considered to be wayward; and people who were poor, indebted, or without means to earn a living. There is also a substantial history of the residential care provided for soldiers injured in armed conflict. There were residential care facilities for specific diseases, such as sanatoriums for the care of people with tuberculosis

(known as consumption and many other names around the world) and leprosariums for people who had contracted leprosy. There were other types of institutions as well.

The enormous growth of institutions was, in part, a pragmatic way to deal with the many serious social problems caused by the industrial revolution. Rather suddenly, towns and cities that were characterized by booming industrial expansion grew rapidly, with little attention given to a corresponding growth of physical or social infrastructure. As a result, large numbers of people were displaced, poorly housed, and ill cared for. Institutions were one quick and easy way to address some of the needs of this population (others included conscription into the army and deportation to distant lands). In one way, institutions fit in well with the thinking of the time. Society was beginning to be seen as working like a giant machine, with all its parts working together toward a single purpose. By this way of thinking, one group such as orphans could be housed separately in orphanages that functioned as working parts of a much larger social machine whose purpose was to provide an overall social structure.

Today, it seems hard for us to believe the extent to which institutions were built and operated. It took huge amounts of financial resources to erect and run these institutions, but this was accomplished because their supposed worth was supported by the leaders in literally all professional groups: medicine, law, education, religion, social work, and many others. It would be unfair to claim that all institutions were intended to be places where only a poor quality life might be led. Indeed, many were set up as charities with an aim to help those who had met misfortune to have an opportunity to lead a gainful life again. Others were set up as schools or hospitals, with the intent to provide special skills training and care away from the influences of unhealthy cities and the demands of mainstream society and provide them with a safer, healthier place to live. Still others, such as insane asylums, were abysmal places by our standards today, although we need to remember that almost nothing was known about mental illness at the time. Certainly, harsh and even horrible residential care was provided in some institutions, although this was not always the case and often not the original intent.

By the late nineteenth century, after Charles Darwin's ideas on survival of the fittest became known and somewhat accepted, the notion of *Social Darwinism* began to take hold. Social Darwinism posited that, if nature improved itself over time by ensuring the survival of the fittest and best adapted, surely society improved itself as well in the same way. It took only one small step in logic for people to begin thinking that if society improved over time anyway, it might improve more quickly if direct and specific steps were taken that would result in improvement.

Darwin's cousin, Arthur Galton, coined the term *eugenics* to succinctly describe this notion. The central idea of eugenics, which functioned as the dominant social philosophy in Europe, North America, and elsewhere for many decades, was that society could be improved by encouraging those who were deemed as desirable to produce children and by discouraging those who were deemed as undesirable to do so. Those with disabilities and mental illness, then distinguished only by general terms such as feeble-minded and insane, were certainly in the undesirable group. For the most part, the objectives of the eugenics movement were accomplished by having men and women housed separately in institutions and forbidding sexual contact, although it was seldom eliminated. It has often been claimed that the German Nazis of the 1930s and 1940s practiced an extreme form of eugenics and that it was the gruesome discovery of the deliberate killings of children with disabilities and adults in mental health institutions, and the concentration camp horrors in Eastern Europe at the end of World War II that resulted in the almost immediate rejection of eugenics as a dominant philosophy. Although this is probably very much the case, it should be remembered that eugenics has been practiced, often in equally horrifying ways, in other countries since that time and is still practiced in mild forms in all countries today (e.g., sterilization of people with disabilities, separation of males and females in residences,

providing opportunities for abortion, and withholding sex education and opportunities for sexual expression).

During the institutional era, there were also large numbers of marginalized people who did not go to live in institutions. Instead, they remained with their families, or lived on their own, on farms or in urban areas. Little is known of this large group of people, as documentation was rare, but it can be assumed that some lived successful lives with support from family while others were not so successful. Certainly, the prevailing view during this long period was that such people "belonged in an institution," and for this reason, they probably experienced a considerably amount of discrimination in their lives.

Almost immediately after World War II, there was a strong move, internationally, to recognize and focus on human rights. The United Nations' *Universal Declaration of Human Rights*, proclaimed in December 1948, illustrates this. Since that time, numerous human rights international, country, and state/provincial conventions, declarations, laws, and policy documents have been generated and acted upon in most countries around the world (although serious gaps still exist). These have helped provide a strong rationale for the move away from institutional care to community living or residential care within "normal" communities. This trend took shape over several decades (especially from the 1960s to 1980s) and was helped enormously by Wolf Wolfensberger's well-known book *Normalization* in 1972.

Beginning about the mid-1970s, there has been a strong focus on moving people from institutional living to community living throughout the more economically developed countries of the world. At first, the emphasis was on the logistics of this rather massive migration, but over time, the emphasis began to shift to the way people were living in communities. Under scrutiny were the types of residences people lived in, their integration into their communities, and the degree to which they were happy. The term quality of life exploded in the 1990s as a way to look at how good people lives actually were, now that it was more generally accepted that they had a right to live in communities everywhere. Quality of life is still a highly relevant concept for people who require residential care, both in community settings and in more segregated settings.

Common Types of Residential Care

People who require residential care today live in a wide variety of residences and receive a wide variety of types and levels of care. They also vary markedly from one part of the world to another. It is not possible to mention every one, but some of the most common types of residential care that relate to current philosophy are briefly described below.

Family Home

For countless centuries and throughout the world, most children and adults who would today be described as having disabilities, seniors, and others who require care lived in their family homes, on farms and in villages. They engaged in activities as they were able and, variously throughout history, were treated with special care or with disdain and neglect. In today's language, living in the family home has always been the "default" option.

Somewhat ironically, the fall from popularity of institutional and segregated living in the last half of the twentieth century coincided with the "modern" notion that people who require residential care are better off living in communities like everyone else. For adults, this meant establishing, or reestablishing, themselves in community settings, and for children and young adults, this usually meant living in the family home where they could take part in the lives of their families and attend local schools. For seniors, there has been an increase in public housing that suits the specific needs of aging people and an increase in in-home care services.

Independent Living

Independent living, as the term suggests, describes a situation where a person – with or without a spouse, life partner, or friend(s) – lives in a residence and a neighborhood that are

typically of his or her own choosing and carries out most life activities and makes most life decisions independent of the control of others. People who live independently typically live in houses, parts of houses, or apartments, but the particular venue can take any one of a wide variety of forms. Independent living does not necessarily mean that the person does not receive some support or care. Indeed, a great many seniors, adults with disabilities, and others benefit from available care and support that address their individual needs. The important distinction in independent living is that the person has the degree of personal control over his or her life that is typical of most other people in the neighborhood.

Supported Independent Living

Some people, such as some adults with disabilities or frail seniors, are able to live independently only if they receive considerable support from outside. Here, individuals may live alone or with others but receive ongoing support from paid disability workers, health and social services available to the general population, volunteers, and/or family members. For seniors, supported independent living typically occurs when they wish to continue living in their own homes or independently but are no longer able to do so without help from others. Support for seniors usually takes the form of regular visits from health care and personal care professionals and regular help from family members and others with household and daily living tasks.

There is usually effort to match the specific types of support given to what is needed by the individual, and because of this, supports can vary widely. An additional factor that contributes to the variety of supports offered is that even when supports are deemed to be needed, they still vary according to what services and resources are available and how available and willing family members, other people, and government agencies are to provide support.

Foster Care and Other Support Families

The more economically developed countries of the world have, for many decades, had government-sponsored systems of foster care. Many other countries have less formal systems. Children in foster care live with other families, rather than their own, for many reasons such as abuse or neglect, being orphans, having severe behavioral or emotional problems, or being subject to severe poverty. In many countries, children with disabilities whose families are unable or unwilling to look after them also live in foster care.

Jurisdictions differ considerably with regard to the age of children who can be cared for by their foster care systems, but most provide such care to at least 16 years of age and sometimes to 21 or more. Foster care remains a controversial type of residential care because foster children often live in multiple homes over their childhoods and this instability is thought to interfere with healthy development for many children. For this reason, foster care is often supplemented or replaced by extended family support (e.g., grandparents or aunts and uncles look after the child) and other types of alternative care.

Small Group Living (Group Homes)

Group living has existed for many centuries, but small group living in the form of group homes became particularly popular in the latter decades of the twentieth century when community living gained favor as highly preferable to institutional living. Group homes emerged as a viable model that helped people with disabilities, offenders, people with mental health problems, and many others adjust to community living in a group supported setting. For adults with disabilities, most residents of group homes with sufficient life skills have moved in recent years to supported independent living because such moves are thought philosophically to promote independence and to be preferred by residents and because it is less costly. Today, most group homes for people with disabilities house people who have severe or profound disabilities.

The controversy over whether or not group homes "belong" in neighborhoods has abated considerably in recent years. Although there is still some objection, group homes are generally included as part of a neighborhood's fabric today.

Intentional Communities

Numerous variations of intentional communities have been built and are functioning in all countries. Intentional communities are purposely designed to respond to the accommodation, service, and social needs of a specific group of people. In its broad sense, every time an expensive housing development, a set of condominiums, a gated community, or a low-cost housing block is developed, it constitutes an intentional community. The term is more commonly used, however, to describe purposely designed communities that are intended for populations that require some personal and residential care. Sometimes, they are based on a particular philosophy, religion, or set of beliefs that set the behavioral standards and determine who lives in the community (typically those who receive care and those who provide it) and many of the activities and services available for the community.

Intentional communities sometimes take the form of *cluster communities*, especially when there are several buildings clustered together to form a subcommunity that is at least somewhat apart from other housing and buildings in the area. They may also form *village communities*, particularly when numerous buildings and amenities are purposely built in a separate location, and operate as a village for residents in need of care and other people such as paid or unpaid staff and their families. An example of a village community is the more than 100 Camphill communities that operate in Europe, North America, Africa, and Asia, which are intended to be life-sharing (people with and without disabilities) communities that provide a full range of life experiences and opportunities for development for children and adults with disabilities. *Residential campuses* are another form of intentional communities that usually serve much more disabled people and feature paid staff. Like other intentional communities, they are characterized by a strong degree of self-containment and a broad range of care and services.

Small Institutional Living

Many types of small institutions are in operation in many, but not all, countries throughout the world today. Some of the more developed countries have closed them, while other countries have never had them for economic or social reasons. Small institutions are usually thought of as residences that provide a fairly wide range of care and services for more than about eight people but are not large sets of buildings set apart from the rest of society. Indeed, many small institutions are in the heart of community residential areas and can access the resources that are available to all other people in the community. What distinguishes them as small institutions, however, is as follows: (1) they house more residents than groups homes, which typically have a maximum of six or eight residents; (2) they are operated by others, and not by the residents who live there; and (3) they operate according to a system of rules and procedures that may be considered administratively efficient, but do not reflect the wishes and needs of individual residents to a high degree. Small institutional living may be of a temporary, or long-term, nature.

Large Institutional Living

In a section above, the legacy of the large institutions is described in some detail because for almost 200 years, it was the dominant social model for addressing people with residential care needs. Large institutions are similar to small institutions in the way they are operated, but in addition, they are characterized by being places that (1) house large numbers of people; (2) are often geographically set apart from the rest of society, such as isolated locations in the countryside; and (3) often consist of sets of buildings that are intended to provide a wide range of life opportunities in-house. Over the last half of the twentieth century, in particular, the number of institutions declined very significantly, and many jurisdictions have now closed them all. Still, large numbers of people – especially people with disabilities and people with mental illness – are housed in large institutions in many countries of the world.

The degree to which this is a "good" or a "bad" thing remains controversial. Conditions, care, and opportunities for choice making and personal development may be curtailed in large

institutions, but the question of whether residents are better off living elsewhere (with families, in group homes, on their own) is one that needs to be considered on a country-by-country basis across time.

Long-Term Seniors Care

For seniors who require long-term care, retirement and nursing "homes" are intentional communities in the sense that they are often sprawling buildings or sets of buildings that contain living quarters, recreational facilities, visiting quarters, health care opportunities, and quite a full range of other amenities. Care is provided by paid staff, volunteers, and outside health care professionals, who do not live in the community but rather come there regularly to work and to provide residents with needed support.

The necessity and value of such long-term seniors care, while it may address the main care and social needs of residents, remains a question for debate for two main reasons. First, from the residents' perspective, residents themselves often do not consider retirement or nursing homes to be their "real" homes but rather places they have had to choose to be in the last part of their lives because other options were not available to them. Such a state of affairs no doubt detracts from satisfaction with their living environments and perceptions of their quality of life. Second, residential care for older seniors is expensive to build and to operate, and there have been many documented examples over the years where lack of funding or lack of overseeing care standards has resulted in low quality of care. Thus, whether or not this model best serves the needs of seniors, their families, and funders is still questioned.

Another type of long-term care for seniors is support within their own homes. In this model, health care professionals, personal care providers, and people who help with household tasks assist people who require long-term care to live as independently as possible. This model is cheaper to administer than nursing homes, but funders in many countries have been reluctant to endorse it wholesale because it is even cheaper to do it in a limited way (based on often-strict eligibility criteria) or not to do it at all.

Influence of Residential Care on Quality of Life

Generally, there is little worry in the available research that people who require residential care do not receive at least adequate care. For example, in a study by Leibowitz, McClain, Evans, and Ruma (1994), residents in different living situations reported satisfaction with their homes and activities, moreso than with a wide range of factors associated with social relationships and supports received. That said, it must be recognized that most reported research has been carried out in more affluent countries, where services are usually at least adequate. Little is known about how the quality of life of people in residential care in lower and middle income countries.

What Do We Know About How Quality of Life Is Affected by Residential Care?

There is an extensive literature on social indicators that spans at least the last 50 years, which addresses numerous aspects of both our residences and our care. There is ample evidence within this literature that where we live and the care that is provided there influence our satisfaction with life and many other indicators of life success (e.g., health status, mortality and longevity, productivity, among others). On the whole, it seems safe to conclude that good residential care – which includes freedom of choice and opportunities to develop – results in higher levels of quality of life, as judged by people themselves and by objective indicators.

There are three additional things about quality of life that we uncovered in the early 1990s that appear to hold up over time and that relate to residential care. First, what we think contributes to quality of life differs among individuals, their families, and their support providers (Brown, 1991; Brown, Raphael, & Renwick, 1997; Hall & Hewson, 2006). Moreover, several studies show that their ratings of quality of life indicators have not always correlated statistically, leading researchers, policymakers, and service providers to the conclusion that one group (support workers, family members) cannot reliably make quality of life ratings on behalf of other people, even if they know them very well.

This appears to be the case for both institutional and community living (Brown et al., 1997; Jacobson & Burchard, 1992). The lesson from this is that quality of life measurement is very much dependent on perspective. Since where people live and the care people with disabilities receive there are important factors that influence one's perspective, residential factors have a strong influence on how quality of life is perceived.

Second, quality of life is very individual in nature. Most measures currently in use feature indicators of aspects of life that are common to all people (e.g., social relationships, physical and mental health, daily activities, material support, opportunities for growth and development). Here, though, there must be latitude to rate the indicators according to individual preferences and what is important to the individual. What one person likes, another may not. What is important to one person may not be so important to another. For example, who can say that two friends is better or worse than eight friends or that seeing your friends once a week is better or worse than seeing them six times a week. It is a matter of individual perspective. Thus, the basic quality of life question that needs to be posed is "Do you have a friend or friends to spend time with to enjoy your life? and How happy are you with your friendships?" rather than "How many friends do you have? and How many times do you see them?" Another aspect of the individual nature of quality of life is that we all have things in our lives that are fairly unique to us and that add a great deal of quality to our lives. For example, when asked what really puts the spark in your life, one person said riding her horse across an open field in the early morning, one man said mountain climbing, and one said growing plants from seed for his garden (Brown & Brown, 2003). These examples illustrate that quality is added to life from very specific things – things that are often unique to our own tastes and activities. Such things usually develop from the environment in which one lives, the type of residence in which one lives, and the type of care one receives there.

Third, choice making (sometimes referred to as personal control) has emerged as a central concept in the quality of life literature. Brown and Brown (2009) described two main aspects to choice: the availability of opportunities from which to choose and the act of selecting from the available options. There is no question that some living options, and some models of care, allow for considerably more choice making than others. Both the community living and the independent living movements gained their momentum from the observation, corroborated by a body of research findings, that choice was more readily achievable in communities than in institutions or segregated living and even more readily achievable in independent than controlled living.

How, Specifically, Does Quality of Life Differ According to Type of Residential Care?

Generally speaking, quality of life appears to be negatively affected when people live in congregate care and when larger numbers of people live in congregate care. For example, Brown et al. (1997) in a large Canadian study found that quality of life scores were highest for people with developmental disabilities living on their own with support, followed by people who lived with family members, then people who lived in group homes, then people who lived in large institutions. Similarly, Mathison (2010) found that quality of life was rated higher for individualized supported living than group homes, which in turn were rated higher than placement centers (ten or more people). Comparing larger group homes, small integrated housing, and people living with families, Young (2006) found that smaller integrated settings better enhanced individual dignity and community involvement.

Another way of considering the relative value of larger and smaller residential care options is to contrast cluster housing (grouping of people together) and dispersed housing (spread throughout communities). Felce, Lowe, Beecham, and Hallam (2001) reported the results of one such study and concluded that dispersed community living is preferable to cluster group living, which in turn is preferable to institutional living for lifestyle and skill development and choice making, adaptive behaviors, and increased quality of life. Similarly, Emerson (2004) found that there

are relatively few benefits to living in cluster housing when compared with dispersed housing and that the latter was characterized by higher quality of care and quality of life.

Other general conclusions pertinent to residential care that can be drawn from the published quality of life literature include:

- In spite of an emphasis on community integration, services in community group homes do not involve residents well in their communities (Fahey, Walsh, Emerson, & Guerin, 2010).
- Residents in group homes and institutions enjoy social contact as much as, or greater than, those who live with families or who live independently, even though there is not always choice about who one's social contacts are (Brown et al., 1997; Hall & Hewson, 2006).
- Dispersed community living options offer increased opportunities for choice making, acquisition of adaptive behaviors, and improved life quality.
- Intentional communities, such as Camphill, show some positive and some negative aspects of quality of life.
- Individuals in village communities are often more satisfied with friendships and relationships than those living in community group homes (Leibowitz et al., 1994).
- Older adults usually report being more satisfied if they continue to live in their own homes but often feel isolated and sometimes overwhelmed (Hall & Hewson, 2006).

One thing that must be remembered when interpreting such findings is that the very characteristics that lead people to live in a particular type of residential care in the first place might also diminish their quality of life. For example, it is likely that those who live in institutions in many countries have higher medical and behavioral needs and lower levels of ability for independent living that those who live in communities. Similarly, people who live in group homes often have more challenges than those who continue to live with family members. Such challenges, themselves, may detract considerably from quality of life. This point is all the more important when we consider that quality of care has been shown on numerous occasions to vary according to ability level, with high ability levels receiving better care.

A second thing to consider is that there are a number of factors that can vary quite considerably even within one living situation type. Some examples that emerge from published research include:

- The physical characteristics of the living environment
- The overall quality of care
- Proximity of the living environment to community facilities and amenities
- The values, attitudes, and philosophy of those in charge of operating the living environment
- Opportunities for social relationships and personal growth in the living environment
- Nature of the caregiver-care recipient relationship
- Skills and ability levels of the residents
- Degree of attention by staff to residents
- Whether or not a residential facility is accredited
- Staff quality of work life
- The degree to which people in residences are integrated with community life and activities

Such factors working together in a multitude of variations result in the quality of care and the quality of life of residents varying widely, leading to examples where a residential care option "should" be associated with high quality of life but is not and where one "shouldn't" be associated with high quality of life but is. For this reason, caution must be used when associating quality of life with particular residential care types in general.

Conclusion of Influence of Residential Care on Quality of Life

Quality of life of individuals is usually better where there is more independence, where quality of care by those who support residents is high, and where residents are "in charge" of their own lives through having opportunities and making choices. This generality needs to be modified when considering individual cases, however, because the many factors that contribute to

a quality environment and to quality care can vary quite considerably from one case to another.

The impact of care on quality of life is considerably more important for some people in residential care than for others. This is the case, for example, for those who have more severe disabilities, who are more frail, and who are more vulnerable. Residential care is a larger part of the daily lives of such people, and they are less able to exercise choice on their own or to carry out life activities without assistance.

What is probably most important for increasing quality of life and to provide better support, as Uchida (2005) advised, is to individualize the environment and the activities to the preferred activities and lifestyles of individuals in residential care. When this is carried out primarily by support staff or by family members, residents need to be asked directly what is important to them regarding their quality of life. There has been ample evidence since 1990 that responses of residents do not match well the responses of those who consider themselves closest to the resident (e.g., Brown, 1991; Brown et al., 1997). Although such individualized care is possible in any living environment, it is easier to accomplish where more independence and more community integration have already been achieved.

Three Levels of Improving Quality of Life for Individuals in Residential Care

Paid staff, family members, volunteers, and others who support people who require residential care often wonder where to begin to improve quality of life through an individualized approach. The brief description of the following three levels, adapted from Brown (1999), provides a simple sequential framework for proceeding in this direction.

Address Basic Needs

We have understood for centuries that quality of life must first address the basic needs of individuals. In particular, adequate food and water, shelter, clothing, and basic care need to be provided, and personal safety and protection need to be ensured. The presence or abundance of such things alone does not necessarily increase quality of life, but their absence most certainly detracts from it. Further, it is difficult to address other needs when basic needs go unmet. Thus, it is essential to begin by focusing primarily on satisfying basic needs when there is evidence of deficit and inadequacy in these areas.

Ensure Life Satisfaction and Personal Development

When basic needs are met, it is important to ensure that individuals' life situations are such that they experience satisfaction and that there are opportunities for growth, development, and adjustment to life's changes. Physical health and emotional stability need to be attended to, and living environments should be both satisfactory to the individual and provide opportunities for rewarding social interaction. Daily activities that support personal care, productivity, and learning new information and skills need to be provided. Together, these constitute ways to ensure satisfactory adaptation to satisfactory living environments, a clear goal of the quality of life approach in residential care settings. The professional and scientific literature provides many details of how these things can be put into practice effectively.

Enhance Meaning of Life and Life Fulfillment

This third level is often not addressed – or at least not addressed well – in either the residential care or quality of life literature. However, it has been clearly identified as an essential aspect of high quality of life for all people in general and thus needs to be included when enhancing quality of life for people who require residential care. The core concept here is that, as human beings, we have a need to move beyond the "ordinariness" of even a satisfactory life to find additional pleasure and meaning to experience life fulfillment. This has been described in many ways, but simply put, it might be thought of as both the "spark" and the "sparkle" of life.

Sometimes enhanced meaning of life and life fulfillment are accomplished by engaging in activities that are unique to the individual and that provide high levels of personal pleasure and fulfillment. These are not only highly pleasurable

and take one to a place beyond ordinary life, but also they are one's "reason for being" that help to address the philosophical questions of who one is and what one's life is really for. At other times, such enhancement is accomplished through transcendence, the act of exceeding the limits of ordinary human life in spiritual, intellectual, and/or physical ways. Transcendence is often considered to be an activity relevant to those who are more intellectually and physically skilled, but as the following real-life example shows, this is not the case:

> Tracy, an 8-year-old girl with severe cerebral palsy, serious health needs, very low vision, and no formal communication system, lived in a small residence near her family home. She enjoyed daily visits from members of her family, and her enthusiastic body movements always indicated that she was especially excited when her father visited. Her father spent time carrying out several activities with Tracy, but he identified one in particular where she seemed to enter into a real state of transcendence. Outside the residence stood a group of pine trees. Tracy's body movements and sounds told her father that she especially loved the sound of the wind through the boughs and the feel and smell of pine needles. When he would squash the needles a little to release their fragrance and rub them gentle against her skin, she would close her eyes and smile, seemingly in a different place beyond her daily life.

Specific ways to enhance the meaning of life and life fulfillment for people who require residential care have not been a priority in the professional literature, which focuses to a much greater extent on how to provide adequate care. The topic has been addressed in a limited way, however, and a great deal of helpful information can be garnered from other disciplines such as psychology, philosophy, and theology.

Conclusion

For individuals who live in residential care, quality of life and the quality of residential care provided are highly related. Our current approaches to residential care are influenced by both the positive and negative aspects of institutional care that was the dominant model for most of the nineteenth and twentieth centuries. Today, we generally aspire to types of residential care that provide more independence and more community integration, as these are more closely linked to better quality of life for individuals, but such aspirations are not always achievable. Thus, we still have a range of residential care types available, and in use, in most countries.

Aside from working to match the types of residential care to the best quality of life, quality of life can be enhanced within any residential care type by adapting the environment and life activities to address individual needs and goals and to reflect individual choice and self-determination. When others who support those in residential care work to do this, a simple three-step sequential framework is helpful to guide their actions: address basic needs, ensure life satisfaction and personal development, and enhance meaning of life and life fulfillment.

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Care, Spiritual

► Spiritual Needs of Those with Chronic Diseases

Care-as-Social Support

► Quality of Life and Quality of Care: an Integrated Model

Career Development

► Counseling

Career Guidance

► Counseling

Caregiver

► Caregiving, Family

Caregiver Activity Survey

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Synonyms

Activities of daily living

Definition

The Caregiver Activity Survey (CAS) is an instrument to measure the amount of time a caregiver spends looking after a patient in the 24-h before the survey.

Description

Caregiver Activity Survey (CAS) contains six items that assess the amount of time a caregiver spends carrying out daily activities

(Davis et al., 1997). The questionnaire included a wide range of activities usually associated with measures of ▶ activities of daily living (ADLs) and instrumental activities of daily living (IADLs). The six-item measure includes the following: (1) communicating with the person, (2) using transportation, (3) eating, (4) dressing, (5) looking after one's appearance, and (6) supervising the person (for their safety).

Each activity group consisted of two questions:

1. How much time caregivers spent performing each activity during the 24 h in question?
   - Each item's score reflects how many minutes is spent in that activity. If caregivers engaged in two tasks at the same time, both activities will be recorded. The maximum values of time spent therefore may exceed 24 h in total due to time spent engaging simultaneously in different activities.

   The CAS total score is the sum of minutes spent in all items.
2. How difficult or bothersome it was for the caregiver to complete these activities on that given day?
   - The responses for each item are on a 10-point scale, with a score of 1 being not difficult at all and a score of 10 being extremely difficult. Scores of 3 or 4 were deemed somewhat difficult, 5 or 6 moderately difficult, 7 or 8 very difficult, and 10 being extremely difficult. The difficulty rating was intended to be used to weigh the time spent in each activity.

Various studies have reported CAS reliability and validity – Davis et al. (1997) reported the Caregiver Activity Survey instrument's test-retest reliability over a 3-week period 0.88 (42 Alzheimer's patients between weeks 1 and 3). Marin et al. (2000) validated the Caregiver Activity Survey instrument's longitudinal results over a period of 1 year and 6 months (44 Alzheimer's outpatients) and reported CAS to correlate significantly with Mini Mental State Exam ($r = -0.58$), Alzheimer's Disease Assessment Scale ($r = 0.56$), and Physical Self-Maintenance Scale subscale ($r = 0.49$). McCarron, Gill, Lawlor, and Beagly (2002) conducted pilot study of the reliability and validity of the Caregiver Activity Survey – Intellectual Disability CAS-ID (30 people with Down's syndrome) and found the CAS-ID to correlate strongly with Down Syndrome Mental Status Examination ($r = -0.77$), the Test for Severe Impairment ($r = -0.88$), and the Daily Living Skills Questionnaire ($r = -0.85$). Empirical study of dementia patients and their caregivers in China ($n = 181$) has shown CAS to be highly correlated with the Chinese version of the Zarit Burden Caregiver Interview ($r = 0.47$) (Ko, Yip, Liu, & Huang, 2008). As well, the Caregiver Activity Survey was used in a Korean study of elderly with dementia ($n = 61$) and reported K-CAS to be correlated with Zarit Burden Caregiver Interview ($r = 0.43$) (Kim et al., 2004).

Cross-References

- ▶ Caregiver Burden Scale: Zarit interview
- ▶ Caregiver Perceived Burden Scale
- ▶ Caregiver, Burden

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Caregiver Burden

► Bakas Caregiving Outcomes Scale

Caregiver Burden Scale: Zarit interview

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Synonyms

Caregiver strain

Definition

Caregiver burden is used to measure negative health outcomes among caregivers for people with conditions, such as dementia, stroke, and cancer.

Description

The 22-item Zarit Burden Interview (ZBI) is a widely used outcome measure of caregiver burden (Zarit, Orr, & Zarit, 1985; Zarit, Reever, & Bach-Peterson, 1980). Items include the following: "1 [care recipient] asks for more help than needed 2 – not enough time for oneself, 3 – feel stressed when caring and trying to meet other responsibilities, 4 – feel embarrassed, 5 – feel angry, 6 – [care recipient] affects relationships with other family members/friends in a negative way, 7 – afraid what the future holds [for care recipient], 8 – feel [care recipient] is dependent, 9 – feel strained when around [care recipient], 10 – feel health has suffered [because of involvement with care recipient], 11 – feel don't have as much privacy, 12 – feel social life has suffered, 13 – feel uncomfortable having friends over, 14 – feel that [care recipient] expects to be taken care as if there is no one else, 15 – feel not enough money, 16 – feel unable to care for much longer, 17 – feel lost control of life since caring role, 18 – wish that could leave the caring role to someone else, 19 – feel uncertain about what to do [with care recipient], 20 – feel should be doing more [for care recipient], 21 – feel you do a better job at caring, and 22 – overall, how burdened in caring role."

Caregivers were asked to assess the level of burden caused by each item scored from 1 ("none") to 5 ("nearly always"). This scale presents a score range from 22 to 110, divided into three levels: no burden (22–46), mild burden (47–55), and severe burden (56–110); a higher score, a greater burden. Items include carer's health, psychological health and well-being, social life, and finance.

Several short-form versions of ZBI have been developed including six short-form versions of Zarit Burden Interview (ZBI-12, ZBI-8, ZBI-7, ZBI-6, ZBI-4, and ZBI-1). For example, the short version includes 12 items compared to 22 items in the original scale and a two-factor structure, one for personal strain (9 items) and the second for role strain (3 items). The ZBI was translated and had been validated in various languages such as French, German, Spanish, Japanese, and Chinese (Farley, Demers, & Swaine, 2008; Kao & Acton, 2006; Martin-Carrasco et al., 2010; Sugiura, Ito, & Mikami, 2007; Wang et al., 2008). A Singaporean study of patients in dementia and their caregivers reported ZBI to be strongly correlated with Burden Assessment Scale, General Health Questionnaire-28, Dementia Management Strategies Scale, and the Revised Memory and Behavior Problems Checklist scores (Pearson's correlation coefficients

ranged from 0.53 to 0.73). The Cronbach's alpha for the ZBI items was 0.93, and the intra-class correlation coefficient for the ZBI test-retest reliability was 0.89 (n = 149) (Seng et al., 2010). A Chinese version of ZBI in patients with dementia reported positive correlation with Chinese Health Questionnaire (r = 0.54) and ▶ Caregiver Activity Survey (r = 0.47); the Cronbach's alpha coefficient was 0.89, and the 2-week test-retest reliability of 36 of the 168 caregivers was 0.88 (Ko, Yip, Liu, & Huang, 2008).

Other related caregiver burden scales in the systematic review by Deeken, Taylor, Mangan, Yabroff, and Ingham (2003) included the following: Caregiver Subjective and Objective Burden Scale (Mongomery, Gonyea, & Hooyman, 1985) – a 22 items 5-point scale (9 objective and 13 subjective measures); Caregiver Burden Scale (Macera, Eaker, Jannarone, Davis, & Stoskopf, 1993) – 15 dichotomous items, as well as Caregiver Burden Scale (Elmstahl, Malmberg, & Annerstedt, 1996) – 22 items 4-point scale with 8 items on general strain, 3 items on isolation, 5 items on disappointment, 3 items on emotional involvement, and 3 items on environment.

Cross-References

- ▶ Caregiver Activity Survey
- ▶ Caregiver Perceived Burden Scale
- ▶ Caregiver, Burden

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Caregiver Competence

- ▶ Caregiver, Self-Efficacy

Caregiver Distress

- ▶ Caregiver, Burden

Caregiver Perceived Burden Scale

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Synonyms

Perceived caregiver strain

Definition

Perceived Caregiver Burden Scale (PCB) is a measure to assess caregiver burden in terms of perceptions and feelings about caregivers' physical and emotional health, family relationships, social life, work, and finances.

Description

Perceived Caregiver Burden Scale is a 31-item scale developed by Stommel et al. (1990). Each item is rated on a 4-point Likert scale, ranging from 1, strongly disagree, to 4, strongly agree. All items (except items 1, 5, 10, 17, and 20) were reverse coded so that "1" equals the low to no caregiver burden and "4" indicates high levels of burden. Scores could range from 31 to 124 with high scores representing high levels of caregiver perceived burden.

The PCB has five subscales which addressed:

1. Impact on finances examining whether caregivers perceived the lack of financial resources to care for the impaired elders (e.g., item 2, difficult to pay for the elder health needs and services; item 3, caring for the elder has put a financial strain on the family)
2. Impact on work schedule examining how caregiving intruded upon daily activities of the caregivers (e.g., item 11, activities are centered around the care for elder; item 12, have to stop in the middle of work or activities to provide care)
3. Feelings of abandonment by extended family examining whether caregivers felt they have been abandoned by other family members who have withdrawn from caring roles (e.g., item 7, very difficult to get help from family in taking care of the elder)
4. Impact on health of caregiver measuring caregivers perceived their own health as a result of caring responsibilities (e.g., item 9, one's health has gotten worse since caring role)
5. Sense of entrapment examining the caregiver's overall emotional reactions towards caring situation (e.g., item 26, since caring for the elder, sometimes hate the way life has turned out; item 28, feel trapped by caregiving role)

Instead of the PCS 31-item version, a study based on 150 Indian and Pakistani caregivers in the Dallas-Fort Worth, USA, used a revised model of PCB-13 based on a confirmatory factor analysis to include 3 main items: impact on finances with four items (alpha = 0.89), impact on work schedule with three schedules (alpha = 0.90), and sense of entrapment with six items (alpha = 0.96) (Gupta 1999). Another study based on 259 caregivers of elderly in Allahabad City, India, (Gupta, 2007) reported three main constructs: impact on finances (alpha = 0.77), abandonment by extended family (alpha = 0.81), and sense of entrapment (alpha = 0.82). Another study has applied the PCB scale to South Korean caregivers and reported the Cronbach's alpha reliability coefficients for the five dimensions of the modified scale to be 0.90 for perceived impact on finances, 0.91 for feelings of abandonment, 0.94 for perceived impact on schedule, 0.97 for perceived impact on health, and 0.94 for sense of entrapment (Choi 1993).

Cross-References

- ▶ Caregiver Activity Survey
- ▶ Caregiver Burden Scale: Zarit interview
- ▶ Caregiver, Burden
- ▶ Self-Perceived Burden to Others

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Caregiver Quality of Life

▶ CarerQol Instrument

Caregiver Self-Esteem

▶ Caregiver, Self-Efficacy

Caregiver Self-Worth

▶ Caregiver, Self-Efficacy

Caregiver Strain

▶ Caregiver, Burden
▶ Caregiver Burden Scale: Zarit interview

Caregiver Stress

▶ Maternal Stress
▶ Caregiver, Burden

Caregiver, Burden

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Synonyms

Caregiver distress; Caregiver strain; Caregiver stress; Caregiver, burden; Caregiving, burden

Definition

Caregiver burden is the multidimensional impact of providing care for a family member or friend with a health condition. It includes consequences of providing care on the caregiver's self-esteem, health, finances, schedule, and feelings of abandonment (Given et al., 1992; Stommel et al., 1993). Providing care includes both direct care (e.g., bathing, feeding, administering medications) as well as indirect and more instrumental care (e.g., driving the care recipient to doctor's appointments, shopping, and handling financial matters). Caregivers also provide emotional support.

Description

Decades of research have documented both positive and negative effects of providing care for someone with a health condition. The majority of this research has been done with caregivers of persons with dementia and caregivers of persons with cancer. Several authors have highlighted positive outcomes from providing care such as establishing a closer relationship with the care recipient and improving caregivers' feelings of self-efficacy (Cohen, Colantonio, & Vernich, 2002; Pinquart & Sorensen, 2004). The majority of research in this area, however, has documented negative feelings or responses

arising from providing care, such as depressive symptoms, anxiety, difficulty sleeping, altered immune responses, increased days of respiratory illness, poor overall health, and increased mortality (Carter, 2006; Gitlin, Winter, Dennis, & Hauck, 2008; Kiecolt-Glaser et al., 2003; Pinquart & Sorensen, 2004; Schulz & Beach, 1999; Sherwood et al., 2006; Vitaliano, Zhang, & Scanlan, 2003). Studies have shown that, compared with non-caregivers, family caregivers have higher levels of depressive symptoms and worse self-rated physical health (Pinquart & Sorensen, 2003). Meta-analyses and systematic reviews of descriptive studies have supported several major hypotheses regarding the negative effects of providing care.

- The prevalence of moderate to severe caregiver burden is between 25 % and 54 % (Rigby, Gubitz, & Philips, 2009).
- The incidence and severity of caregiver burden varies over the course of the care recipient's illness and is high during active treatment (Hodges, Humphris, & Macfarlane, 2005; Kim, Spillers, & Hall, 2012; Rigby et al., 2009).
- Factors associated with caregiver burden include caregivers' gender, levels of depressive symptoms, anxiety, ethnicity, and the amount of care provided (Pinquart & Sorensen, 2007; Rigby et al., 2009).
- Female caregivers report higher levels of burden (Hodges et al., 2005; Pinquart & Sorensen, 2006).
- Caregivers with higher levels of depressive symptoms report higher levels of burden (Pinquart & Sorensen, 2003; Rigby et al., 2009).
- Caregivers with higher levels of anxiety report higher levels of burden (Rigby et al., 2009).
- Caregivers who provide more physical care report higher levels of burden (Rigby et al., 2009).
- African American caregivers report lower levels of burden compared to white caregivers (Gitlin et al., 2008; Pinquart & Sorensen, 2005).
- Factors associated with worse physical health in caregivers (one aspect of caregiver burden) include age, gender, relationship to the care recipient, residence, education, income, social support, depressive symptoms, and care recipients' cognitive status (Pinquart & Sorensen, 2007).
- Older caregivers report worse physical health (Pinquart & Sorensen, 2007).
- Female caregivers report worse physical health (Pinquart & Sorensen, 2006).
- Caregivers who are not the spouse of the care recipient (e.g., adult children) report worse physical health (Pinquart & Sorensen, 2007).
- Caregivers who live with the care recipient report worse physical health (Pinquart & Sorensen, 2007).
- Caregivers with lower levels of education report worse physical health (Pinquart & Sorensen, 2007).
- Caregivers with lower incomes report worse physical health (Pinquart & Sorensen, 2007).
- Caregivers with less informal support (support from friends and other family members) report worse physical health (Pinquart & Sorensen, 2007).
- Caregivers who report higher levels of depressive symptoms report worse physical health (Pinquart & Sorensen, 2007).
- When care recipients display disruptive behaviors and/or cognitive problems (e.g., hallucinations or problems with memory), caregivers report worse physical health (Pinquart & Sorensen, 2007).

In response to the prevalence and magnitude of negative reactions to providing care, multiple interventions have been trialed to reduce caregiver burden. Interventions have included components such as providing education, respite care, pharmacologic management of the care recipient's behavioral problems, teaching coping and problem-solving skills, and providing education related to the care recipient's disease process. Meta-analyses and systematic reviews of intervention studies have supported several major hypotheses regarding interventions to lessen caregiver burden.

- Psychoeducational interventions, particularly those with active participation from the caregiver and those that teach problem-solving, reduce caregiver burden (Pinquart & Sorensen, 2006).

- Interventions based on cognitive behavioral theories (such as problem-solving) reduce caregiver burden (Gitlin et al., 2008).
- Multicomponent interventions are more effective at reducing burden than interventions utilizing a single component (e.g., relaxation techniques), particularly interventions that tailor problem-solving skills to meet caregivers' specific needs (Northouse et al., 2005, 2007, 2010).
- When family members are providing care for someone with dementia, medications to control negative behaviors in the care recipient reduce caregiver burden (Lingler, Martire, & Schulz, 2005).
- Palliative care interventions at the end of the care recipient's life reduce caregiver burden (Lorenz et al., 2008).

Discussion

In summary, multiple studies have identified caregivers who are at risk for burden and have begun to identify interventions to improve caregivers' emotional health. The first step in improving caregiver burden is to identify those at risk. Screening should be performed at routine intervals throughout the care continuum with particular attention to transitions in care (e.g., at the onset of new treatment). Multiple tools have been developed to assess caregiver burden. Short screening tools are available for use in clinical practice, primarily for caregivers of persons with dementia (American Medical Association, 2010; Zarit, Reever, & Bach-Peterson, 1980). These tools are generally short, easy to use in clinical practice, and take relatively little time to score.

Once caregivers at risk for burden are identified, a more comprehensive multidimensional assessment of caregiver burden should be completed (Kim, Kashy, Spillers, & Evans, 2010). These assessments are typically longer, which decreases their applicability in clinical practice, but imparts more information regarding the impact of providing care on multiple aspects of the caregiver's life. This information is essential to design and implement effective interventions. Most caregiver interventions have been delivered by health care professionals who have clinical experience in the care recipient's disease. Based on research findings, interventions most likely to be effective should be theoretically based and multicomponent in nature. Improving caregiver burden has the potential to improve caregiver's physical health (Sherwood et al., 2008), which, in turn, has the potential to maintain family members in the caregiving role (decreasing the need for external healthcare resources) and may improve the quality of care provided to the care recipient.

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Caregiver, Self-Efficacy

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Synonyms

Caregiver competence; Caregiver self-esteem; Caregiver self-worth; Caregiving, self-efficacy

Definition

Caregiver self-efficacy refers to a person's perception of their ability to perform tasks related to caregiving competently, capably, and with control.

Description

Self-efficacy is an important concept in understanding the informal caregiver's perceived ability to execute caregiving tasks. It refers to the belief held by a caregiver that they can assume personal control over caregiving problems (Au et al., 2010). Caregiver self-efficacy can predict aspects of quality of life in both the patients for whom they provide care and in the caregivers themselves. It may also predict aspects of caregivers' caregiving behaviors. The Caregiver Reaction Assessment (Given et al., 1992) and the Revised Scale for Caregiving Efficacy (Steffen, McKibbin, Zeiss, Gallagher-Thompson, & Bandura, 2002) are commonly used standardized scales for measuring this construct.

Caregiver self-efficacy can predict aspects of the quality of life of their loved ones.

Caregiver self-efficacy in managing a patient's pain has been related positively to the patient's ratings of their physical health. When caregivers of cancer patients have high caregiver self-efficacy in pain management, patients report having more energy and feeling more physically healthy (Keefe et al., 2003). Other research has found that low caregiver self-efficacy predicted higher anxiety in patients and poorer self-ratings of their quality of life (Porter, Keefe, Garst, McBride, & Baucom, 2008).

Caregiver self-efficacy is also associated with aspects of caregivers' quality of life. For instance, caregivers of cancer patients have reported caregiving to be physically and emotionally draining, if they had little confidence in their abilities to help the patient manage pain (Ferrell, Ferrell, Rhiner, & Grant, 1991). These and similar findings have clinical implications for the psychological adjustment of caregivers, by suggesting low caregiver self-efficacy as a mechanism for onset and maintenance of depression (Au et al., 2010). A caregiver with low self-efficacy may also need more emotional support than a caregiver with high self-efficacy (Steffen et al., 2002). Caregivers low in self-efficacy also report deficits in their physical health (Au et al., 2010). In summary, those with low caregiver self-efficacy may report concerns relating to several quality of life domains.

Recent studies have explored factors that help explain why some persons feel they are able to perform caregiving tasks competently, while others do not. Caregiver self-efficacy has been associated with several sociodemographic factors. Ethnic minority as opposed to Caucasian caregivers, caregivers with higher education and who had provided care for a longer duration, and adult offspring as opposed to spousal caregivers report higher levels of caregiver self-efficacy (Depp et al., 2005; Huang, Shyu, Chen, & Hsu, 2009; Keefe et al., 2003; Steffen et al., 2002). The majority of these findings come from studies of caregivers of dementia patients. Future research including caregivers of different types of patients is desirable for better understanding predictors of caregiver self-efficacy.

Caregiver self-efficacy is also particularly relevant in explaining variability in family caregivers' ability to effectively perform their caregiving responsibilities (Au et al., 2010). Family members with high self-efficacy are more likely to assume the role of primary informal caregiver and remain so as their loved one's condition persists chronically and worsens or as providing care becomes more physically and emotionally deleterious (Steffen et al., 2002).

Interventions targeting caregiver self-efficacy aim to improve aspects of quality of life in caregivers and their loved ones in addition to strengthening caregiving behaviors. Modeling, goal-setting, verbal persuasion, and reducing aversive psychological symptoms are a few commonly used modalities for improving self-efficacy, which are also used for caregiver self-efficacy (Bandura, 1997). Psychoeducational interventions have also been suggested for fostering caregiver self-efficacy and overall adjustment (Steffen et al., 2002). Overall, research indicates that these interventions have a moderate effect on caregivers' short- and long-term self-efficacy (Sörensen, Pinquart, & Duberstein, 2002).

Cross-References

- ▶ Caregiver Quality of Life
- ▶ Caregiving
- ▶ Quality of Life (QOL)

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Caregivers of Patients with Eating Disorders, Quality of Life

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Synonyms

Anorectic Behavior Observation Scale (ABOS); Anorexia nervosa; Bulimia nervosa and caregivers; Clinical Global Index Scale (CGI); Eating Attitudes Test (EAT-26); Health-Related Quality of Life in ED-short form (HeRQoLED-s); Hospital Anxiety and Depression Scale (HADS)

Definition

Mental illness in a close relative can be particularly stressful for family members, especially those who are also caregivers of the patient (Baronet, 1999; Hunt, 2003). Eating disorders (EDs) pose special problems for families, as they tend to persist over long time periods. Relatives are often the main caregivers for patients with EDs and usually participate actively in the treatment process (Steinhausen, 2009). The stress derived from taking care of a loved one can affect a caregiver's health-related quality of life (HRQoL), defined as a person's subjective assessment of how a disease and its treatment affect that person's physical, psychological, and social functioning and well-being. The HRQoL of caregivers of ED patients has received little attention. The pioneering study of De la Rie, Van Furth, De Koning, Noordenbos, & Donker, (2005) studied this topic, using the SF-36, and found both that their quality of life was worse than that of the general population and that the most affected area was the mental-related area. The following study is designed to analyze the HRQoL of a sample of ED patient caregivers with respect to their relationships to the patient.

Description

Methods

Subjects

A cross-sectional study was undertaken of consecutive patients diagnosed with, and treated for, an ED in the Eating Disorders Outpatient Clinic of the Psychiatric Services at Galdakao-Usansolo Hospital and Ortuella Mental Health Center in Bizkaia, Spain, and their caregivers. Eligible patients included those between the ages of 16 and 65 years who had been diagnosed with anorexia nervosa or bulimia nervosa based on criteria set out in the Diagnostic and Statistical Manual of Mental Disorders, 4th edition. Prior to inclusion in the study, each patient's caregiver completed four HRQoL questionnaires and the patient's psychiatrist completed the clinical protocol. Patients were excluded if they had malignant, severe organic diseases, could not

complete the questionnaires because of language barriers, had not given written informed consent, or if their caregiver did not answer the questionnaires.

Caregivers were selected on the basis of being primary caregivers for outpatients diagnosed with an ED. Caregivers were included in the study if they agreed to participate voluntarily, if the patient for whom they were caring agreed to participate voluntarily, and if they provided written informed consent. The exclusion criteria were the same as for the patients.

Materials

Caregivers provided sociodemographic data. They also completed Spanish language versions of four self-administered HRQoL instruments:

-*The Short-Form 12* (*SF-12*) is a 12-item instrument designed to measure HRQoL (Gandek et al., 1998).

-*The Involvement Evaluation Questionnaire-EU Version* (*IEQ-EU*) is a 31-item self-rated questionnaire that assesses the perceived burden imposed by caregiving (Van Wijngaarden et al., 2000).

-*The Hospital Anxiety and Depression Scale* (*HADS*) is a 14-item instrument used to screen for anxiety and depression in nonpsychiatric settings (Quintana et al., 2003).

-*The Anorectic Behavior Observation Scale* (*ABOS*) is used to evaluate a patient's eating behavior based on information provided by his or her caregiver (Instituto Nacional de la Salud, 1995).

The ED patients completed the *Eating Attitudes Test* (*EAT-26*), which assesses the behavioral and cognitive characteristics of ED patients (Castro, Toro, Salamero, & Guimera, 1991). Patients' quality of life was evaluated using the *Health-Related Quality of Life in ED-short form* (*HeRQoLED-s*) (Las Hayas, Quintana, Padierna, Bilbao, & Munoz, 2010).

Each patient's psychiatrist recorded the severity of the ED and the length of treatment by completing the *Clinical Global Index Scale* (*CGI*) (Guy, 1976).

Data Analysis

Descriptive statistics of sociodemographic and clinical variables were calculated. A univariate analysis was undertaken to determine which variables were predictors of the PCS and MCS. In the multivariate analysis, we developed hierarchical linear mixed models that used the Physical Component Scale (PCS) and the Mental Component Scale (MCS) as dependent variables. All effects were deemed statistically significant at $p < 0.05$. All statistical analyses were performed using SAS System, version 9.1 (SAS Institute, Inc., Carey, NC).

Results

The study sample included 309 caregivers and 161 patients with an ED. Of these, 246 caregivers (79.6 %) and 145 patients (85.8 %) fulfilled the inclusion criteria and completed all the questionnaires.

The patients' sociodemographic and clinical characteristics are presented in Table 1.

Caregivers of Patients with Eating Disorders, Quality of Life, Table 1 Descriptive analysis of eating disorder patients

	Patients (n = 145) n (%)
Gender	
Female	143 (98.6)
Age[a]	25.56 (8.89)
Type of compensating behavior	
Restrictive	67 (46.21)
Purgative + others	78 (53.79)
Clinical Global Index	
Mild	41 (28.28)
Moderate	49 (33.79)
Severe	55 (37.93)
Time spent in clinical treatment	
<5 years	63 (43.75)
≥5 years	81 (56.25)
Health-Related Quality of Life for Eating Disorders Questionnaire-short form	
Social maladjustment domain	53.35 (22.71)
Mental health and functionality domain	48.59 (22.39)
Eating Attitudes Test-26 factors	
Dieting scale	16.40 (10.90)
Bulimia and food concern scale	16.83 (4.57)
Oral control subscale	7.17 (5.37)

[a]Means standard deviation. Restrictive: AN-restrictive + BN-nonpurgative + EDNOS restrictive. Purgative + others: BN-purgative + AN-purgative + EDNOS purgative + EDNOS Binge

Caregivers of Patients with Eating Disorders, Quality of Life, Table 2 Sociodemographic characteristics of caregivers of ED patient according to their relationship to the patient

	Relationship of caregiver to ED patient					
	Mother (n = 111)	Father (n = 70)	Partner (n = 34)	Other[b] (n = 31)	Total (n = 246)	P-value
	n (%)	n (%)	n (%)	n (%)	n (%)	
Gender						**<0.0001**
Female	111 (100.00)	0 (0.00)	0 (0.00)	20 (64.52)	131 (53.25)	
Male	0 (0.00)	70 (100.00)	34 (100.00)	11 (35.48)	115 (46.75)	
Age[a]	52.36 (7.95)	55 (7.79)	36.26 (7.40)	28.84 (10.44)	47.92 (12.43)	**<0.0001**
Marital status						**<0.0001**
Single	1 (0.90)	1 (1.43)	7 (20.59)	24 (77.42)	33 (13.41)	
Spouse/partner	91 (81.98)	67 (95.71)	27 (79.41)	6 (19.35)	191 (77.64)	
Divorced	8 (7.21)	2 (2.86)	0 (0.00)	1 (3.23)	11 (4.47)	
Widow(er)	11 (9.91)	0 (0.00)	0 (0.00)	0 (0.00)	11 (4.47)	
Educational level						0.006
Primary education	57 (53.27)	27 (38.57)	5 (15.15)	11 (35.48)	100 (41.49)	
Secondary education	22 (20.56)	13 (18.57)	10 (30.30)	8 (25.81)	53 (21.99)	
Higher education	28 (26.17)	30 (42.86)	18 (54.55)	12 (38.71)	88 (36.51)	
Contact with patient (hours/week)						**0.0001**
≤32	52 (49.06)	46 (66.67)	10 (29.41)	24 (77.42)	132 (55.00)	
≥32	54 (50.94)	23 (33.33)	24 (70.59)	7 (22.58)	108 (45.00)	

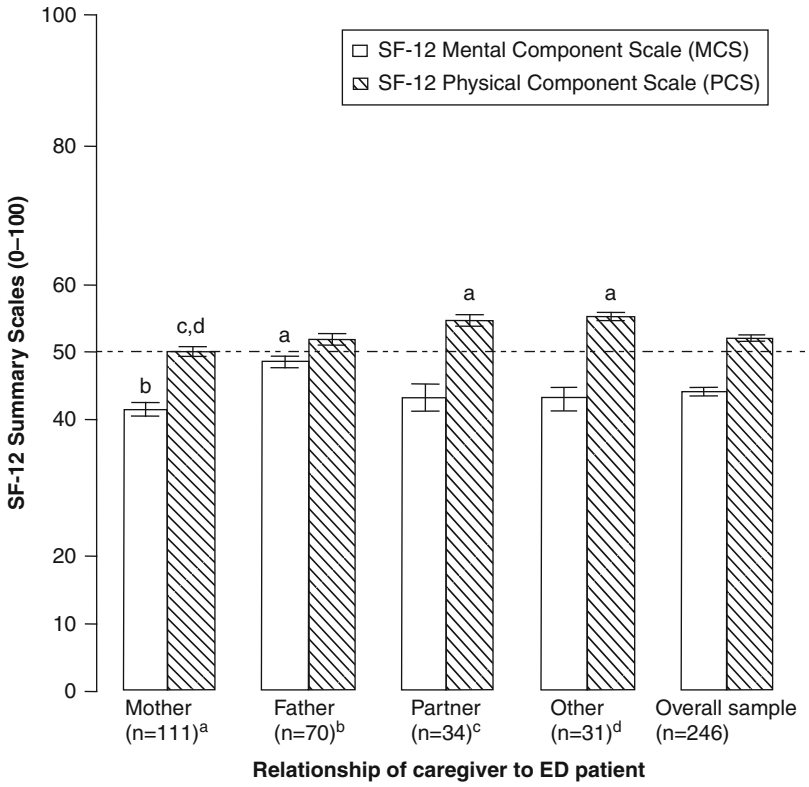
[a]Means standard deviation
[b]Other: sibling or child of ED patient
P-values in bold indicated a significance level of $p < 0.005$

The sample was heterogeneous, being composed by a 44.13 % of patients diagnosed with AN, 24.83 % with BN, and 31.03 % had a diagnosis of EDNOS.

The caregivers' sociodemographic characteristics are presented in Table 2. According to the HADS scores (anxiety subscale) 51.44 % of carers (n = 125) did not present symptoms of anxiety, 21.40 % (n = 52) were classified as possible cases of anxiety, and 27.16 % (n = 66) surpassed the cutoff score of 11 indicating that the patient presented many anxiety symptoms. In relation to the symptoms of depression (HADS depression) the proportion of caregivers with no symptoms of depression was 72.84 % (n = 177), whereas 16.87 % (n = 41) were classified as possible case of depression and 10.29 % (n = 25) score above the cutoff point of 11 indicating that the patient presented many depressive symptoms. On the SF-12 domains, the mean MCS score was 44.23 (SD = 10.38) and the mean PCS score was 54.05 (SD = 7.56). In the MCS, mothers (mean = 41.76; SD = 11.42) scored worse than fathers (mean = 48.62; SD = 6.70) ($p < 0.001$). In the PCS, mothers scored worse than partners (mean = 43.31; SD = 11.95) and child or sibling caregivers (mean = 43.03; SD = 9.26) (p = 0.001; see Fig. 1). Scores for caregivers on the SF-12 MCS and PCS according to a univariate analysis of the caregivers' and patients' sociodemographic and clinical variables are presented in Table 3. The results of the multivariate analysis are presented in Table 4.

Discussion

The study indicates that caring for an ED patient is associated with a low score in the mental



Caregivers of Patients with Eating Disorders, Quality of Life, Fig. 1 SF-12 scores for ED patient caregivers. *Superscript letters* show intercategory statistical differences with respect to the relationship in each of the SF-12 summary scales. The *dashed line* indicates the cutoff point for SF-12

component, but not the physical component, of the SF-12, suggesting a significant impact on caregiver mental health, especially among mothers and partners of the patients.

The findings agree with those of De la Rie et al., (2005), who also found that caregiving for a patient with an ED had a negative impact on the mental health domains of the SF-36, especially the mental health, vitality, and role emotional domains, but no impact on the physical domains. This is to be expected given the type of care usually needed by a patient with an eating disorder. The care provided to ED patients involves supervising their eating behaviors, persuading them to change compulsive behaviors, preventing social isolation, withstanding mood swings, and worrying about their future (Kamerling & Smith, 2010). The study suggests that providing care to a patient with an ED has a marked emotional impact, as 27 % of the caregivers appear to suffer from probable anxiety symptoms and 10.3 % from probable depressive symptoms, which is higher than the figures registered for the general population, as prevalence of anxiety and mood disorders in the general European population is 6 % and 4.2 %, respectively (Whitney, Haigh, Weinman, & Treasure, 2007).

The four factors associated with lower caregiver HRQoL in the mental health domain include, in decreasing order of importance, the caregiver's relationship with the patient, the presence of purgative behaviors, the caregiver's perceived burden of care, and the caregiver's perception of the problem. The most important factor is the relationship between the caregiver and patient. Mothers and partners are most affected by providing care to a patient with an ED, probably due to the fact that they undertake a greater number of supervisory

Caregivers of Patients with Eating Disorders, Quality of Life, Table 3 Univariate analysis of the caregivers' SF-12 scores according to their sociodemographic and clinical variables

	SF-12 mental component scale			SF-12 physical component scale		
	(SD)	Pearson's r	P-value	(SD)	Pearson's r	P-value
Caregiver variables						
Gender			**0.0006**			0.0518
Female	41.89 (10.73)			51.08 (8.41)		
Male	46.62 (9.47)			53.05 (6.48)		
Type of caregiver			**<0.001**			**<0.001**
Mother[a]	41.76 (11.42)[b]			50.11 (8.70)[c, d]		
Father[b]	48.62 (6.76)[a]			51.84 (7.05)		
Partner[c]	43.31 (11.95)			54.80 (5.63)[a]		
Others[d]	43.22 (9.16)			55.35 (4.35)[a]		
HAD-Anxiety Scale			**<0.0001**			**<0.0001**
≤ 7[e]	49.74 (7.19)[f]			53.47 (5.79)		
8–10 f	41.91 (9.05)			53.33 (6.14)		
≥11[g]	35.37 (9.99)[e, f]			48.13 (10.12)[e, f]		
HAD-Depression Scale			**<0.0001**			**0.002**
≤7[h]	47.67 (8.17)[j]			52.89 (6.85)		
8–10[i]	38.60 (7.74)			51.18 (8.37)		
≥11[j]	28.34 (10.26)			47.07 (9.44)		
Age		0.10	0.105		−0.34	**<0.0001**
IEQ						
Tension		−0.17	0.01		−0.35	**<0.0001**
Supervision		−0.17	0.009		−0.28	**<0.0001**
Worrying		−0.24	**0.0003**		−0.29	**<0.0001**
Urging		−0.14	0.04		−0.27	**<0.0001**
ABOS						
Eating behavior		−0.19	0.005		−0.28	**<0.0001**
Bulimic-like behavior		−0.24	**0.0004**		−0.17	0.01
Hyperactivity		−0.05	0.43		−0.15	0.03
Patient variables		Beta (SE)	P-value		Beta (SE)	P-value
Age		0.069 (0.09)	0.0428		−0.109 (0.060)	0.074
HeRQoLED-s						
Social maladjustment		−0.042 (0.03)	0.193		−0.021 (0.02)	0.337
Mental health and functionality		−0.070 (0.03)	0.043		−0.024 (0.02)	0.312
Type of compensating behavior						
Restrictive		Reference			Reference	
Purgative + others		−3.575 (1.434)	0.015		−0.865 (1.044)	0.409
CGI						
Mild		Reference			Reference	
Moderate		−2.205 (1.850)	0.237		3.592 (1.283)	0.006
Severe		−2.874 (1.864)	0.127		1.467 (1.295)	0.261

SD means standard deviation. Pearson's r: Pearson's correlation coefficient for continuous variables only. Superscripts letters in the "Caregiver variable" column represent the name of the variable and identify the group. Superscript letters in the column of the "mean values" represent statistical differences between groups. *HADS* The Hospital Anxiety and Depression Scale, *IEQ* involvement evaluation questionnaire, *ABOS* anorectic behavior observation scale, *SE* standard error. Reference: reference group. *HeRQoLED-s* health-related quality of life for eating disorders questionnaire-short form, *CGI* clinical global index. Purgative + others: BN− purgative + EDNOS purgative + EDNOS Binge. "ED type" and "EAT-26" are omitted *from the rows* as results were not statistically significant. P-values in bold indicated a significance level of $p < 0.005$

Caregivers of Patients with Eating Disorders, Quality of Life, Table 4 Multivariate analysis of caregivers' SF-12 mental and physical summary scale scores

	SF-12 mental		SF-12 physical	
	Beta (SE)	P-value	Beta (SE)	P-value
Intercept	60.905 (3.432)	<**0.0001**	63.826 (3.32)	<**0.0001**
Caregiver age	–	–	−0.213 (0.06)	<**0.001**
Relationship of caregiver to ED patient				
Father	Reference		Reference	
Mother	−5.341 (1.389)	<**0.001**	−1.910 (1.137)	0.097
Partner	−5.471 (2.153)	0.013	−0.760 (1.846)	0.682
Others	−5.145 (2.070)	0.015	−2.323 (2.175)	0.288
IEQ Tension subscale	−0.360 (0.162)	0.029	–	–
IEQ Urging subscale	−0.340 (0.155)	0.031	–	–
ABOS Factor I: Eating behavior	−0.307 (0.117)	0.011	–	–
ABOS Factor II: Bulimic-like behavior	–	–	−0.572 (0.141)	<**0.001**
Patient age	0.159 (0.091)	0.087	–	–
Type of compensating behavior				
Restrictive	Reference		–	–
Purgative + others	−3.981 (1.396)	0.006	–	–
CGI				
Mild	Reference		Reference	
Moderate	–	–	3.728 (1.202)	**0.003**
Severe	–	–	2.995 (1.272)	0.021
Variance components				
Between subject variance	20.8455 (11.04)	0.029	0.02 (0.004)	0.04
Total variance	64.475 (10.757)	<**0.001**	46.183 (4.507)	**0.001**

SE: standard error. Models were developed taking into account restrictive patients with mild diagnostic levels and fathers as caregivers. *IEQ* involvement evaluation questionnaire, *ABOS* anorectic behavior observation scale. Purgative + others: BN-purgative + EDNOS purgative + EDNOS Binge. *CGI* clinical global index. –: not included in the model. P-values in bold indicated a significance level of $p < 0.005$

roles at mealtimes. It is also possible that mothers adopt a more emotional coping style than fathers or other caregivers, which may lead to greater stress (Whitney, Haigh, Weinman, & Treasure, 2007). The lower impact on fathers could also be due to their lower involvement in practical care roles, as suggested by their lower scores on all the IEQ-EU subscales, or because their coping style is aimed more towards problem solving (Kyriacou, Treasure, & Raenker, 2010).

The second most important predictor of low caregiver HRQoL was the presence of purgative behaviors. Whereas the ED subtype has not shown to have predictive value in our study, the type of compensatory behaviors (i.e., purgative vs. restrictive behaviors) has shown to have an influence in the mental health of caregivers.

The third most important predictor of low HRQoL was the greater perceived burden, resulting from routine supervision of these patients, episodes of tension in the caregiver-patient relationship and the need to urge the patient to do things.

The fourth predictor of caregiver HRQoL was caregivers' own perception of the severity of the ED, which did not necessarily agree with the assessment by the patient or treating physician. This finding is in agreement with Lazarus' cognitive theory of stress (Lazarus & Folkman, 1984), which proposes that the caregiver's

subjective view of the situation determines whether an event is experienced as stressful or not and helps shape the adoption of coping strategies.

Limitations of this study should also be noted. One limitation is the assessment at a single point in time, making it impossible to observe change in caregiver HRQoL over time. Another limitation is that the IEQ-EU has been validated for evaluating the burden of caring for patients with psychosis and mood disorders, but not for EDs.

In summary, this study has confirmed the marked negative impact that caring for a patient with an ED can have on a caregiver's mental HRQoL. Mothers of patients with purgative behaviors are especially affected. Caregivers' HRQoL is influenced by their perception of the care burden, involvement in the care process, and their own assessment of the severity of the ED. Further study of these factors could make it easier to identify caregivers in greater need of professional support and help them to adopt caring strategies that are less detrimental to their own well-being or HRQoL.

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Caregivers' Health-Related Quality of Life with Asthmatic Children

► Parents with Asthmatic Children, Quality of Life

Caregivers' Quality of Life with Asthmatic Children

▶ Parents with Asthmatic Children, Quality of Life

Caregiving

▶ Caregiving and Quality of Life

Caregiving and Quality of Life

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Synonyms

Caregiving

Definition

Caregiving is the provision of assistance to someone who is in some way incapacitated. Some caregivers receive pay for providing care, such as providers in a nursing home or skilled care facility. However, the majority of care provided in the community is through unpaid informal caregiving. Informal caregivers can be family members such as a spouse, adult child, or sibling; other family member; neighbor; or friend. They help with the person's medical and emotional needs and can provide a wide range of tasks such as bathing, giving medications, feeding, and dressing. While caregiving can give the caregiver a sense of personal fulfillment, it can also be associated with physical and psychological distress which affects the caregiver's health and health-related quality of life (HRQoL).

Description

Informal caregivers are an important source of care in the USA. They provide an estimated $375 billion per year in informal care services (National Family Caregivers Association [NFCA], 2012). Most people in the community with chronic and disabling diseases rely on informal caregivers. Approximately 65.7 million Americans age 18 or older are providing unpaid care to a child or an adult and 52 million caregivers provide care to those 18 years of age or older (National Alliance for Caregiving [NAC] and AARP, 2009). The number of informal caregivers is expected to rise as the number of Americans 65 years and older is expected to increase from 35 million in 2000 to over 71 million in 2030 (Centers for Disease Control, Prevention [CDC], 2003). With more adults who have chronic diseases and disabilities living in their homes, informal caregivers will be more in demand.

Much of the research on caregiving has focused on the psychological aspects of providing caregiving services. There has been little consideration of the population-based public health outcomes of caregivers (Talley & Crews, 2007). The health and well-being of caregivers should be evaluated at the population level, given the increasing importance of their role in caring for people with disabilities. Attention should be given to improving the health of caregivers as there are many policy implications when caregivers have reduced HRQoL. A caregiver's health and HRQoL might directly affect the quality of care provided to the care recipient. The stress of caregiving may have a detrimental effect on caregiver HRQoL (Markowitz, Gutterman, Sadik, & Papadopoulos, 2003) as well as

increased morbidity and mortality (Jacobi et al., 2003). If a caregiver has poor HRQoL, they may be less able or willing to confer a high quality of care to the care recipient, and worsening HRQoL, or increasing physical impairment of caregivers, could increase the likelihood that a care recipient might be transferred to a congregate care facility. Society is impacted because it benefits economically from the provision of informal caregiving as care is provided at home.

The US Department of Health and Human Services *Healthy People 2020* includes health promotion and disease prevention in people with disabilities (US Department of Health and Human Services [DHHS], 2012). The report calls for the reduction in the proportion of unpaid caregivers of older adults who report an unmet need for caregiver support services and reduction in the number of people with disabilities living in congregate care residences. It also highlights the need to have population-level surveillance data on caregivers. Such data are not readily available and more research is needed on the impact of caregiving at a broader public health level.

In order to evaluate impact of caregiving on a large national sample, a study was conducted by Neugaard et al. (2008) using population-level data to evaluate the impact of caregiving on HRQoL. The 2000 Behavioral Risk Factor Surveillance Systems (BRFSS) was used to identify those who provide informal care and to assess their HRQoL. The BRFSS is a national telephone health survey conducted each year by the Centers for Disease Control and Prevention (CDC) of the noninstitutionalized adult population in the USA to collect information on health risk behaviors, access to ▶ health care, and preventive health practices. The respondents were from the 50 States, the District of Columbia, and Puerto Rico.

By using a large representative national sample, information could be provided on the public health impact of caregiving that previously was not well researched. The hypothesis was that HRQoL of caregivers would be less than that experienced by non-caregivers, and that women would have lower HRQoL than men. In the BRFSS survey, participants were asked if they provided regular care or assistance to a family member or friend who is elderly or has a long-term illness or disability. Specifically, they were asked if they provided care or assistance to a family member or friend 60 years or older within the past month. They were also asked several questions related to HRQoL on general health status (i.e., "Would you say that in general your health is excellent, very good, good, fair, or poor?"), and the number of days during the past 30 days their physical or mental health was not good. The total number of physical or mental health days that were not good, that is, the number of "unhealthy days," was then subtracted from 30.

Binary logistic regression models were used to analyze the effect of caregiver status on poor or fair health while ordinary least squares (OLS) regression and multinomial logistic regression models examined the relationship between healthy days and caregiving status. In the multinomial logistic regression models, 1–29 days and 30 days were compared to the reference category of 30 healthy days. The analyses were adjusted for potential confounders such as age, education, gender, marital status, and income. There were 184,500 participants in the BRFSS 2000 survey. Overall, the caregivers were more likely to be women, older, married, and unemployed. The relationship between HRQoL and caregiver status was found to have been modified by age and, therefore, HRQoL analyses were stratified by age categories (<55 years old vs. 55 years and older). In the fully adjusted logistic regression model, caregivers who were <55 years old were found to be at an increased risk of poor or fair health (OR = 1.35, 95 % CI 1.28, 1.43, $p < 0.001$) compared to non-caregivers their age. Interestingly, caregivers who were 55+ were at a 3 % reduced risk (OR = 0.97, 95 % CI 0.92, 1.03, $p < 0.001$) in the fully adjusted model of rating their health as fair or poor compared to non-caregivers their age.

In the OLS regression models, caregiver status was found to be associated with a reduction in the number of healthy days the caregiver

experienced. In the adjusted model, caregivers who were <55 years of age had a decrease of 1.44 healthy days compared to non-caregivers their age. Likewise, caregivers 55+ had a decrease of 0.55 healthy days compared to non-caregivers their age. In the adjusted multinomial logistic regression models, caregivers <55 years old had a 68 % increased risk of having zero healthy days compared to non-caregivers their age (OR = 1.68, 95 % CI 1.52, 1.71) and a 27 % increase in having 1–29 healthy days compared to 30 (OR = 1.27, 95 % CI 1.23, 1.32), while caregivers 55+ had a 15 % increased risk of having no healthy days compare to non-caregivers their age and a 25 % increase in having 1–29 compared to 30 healthy days.

Discussion

The results of this study highlight the implications of caregiving as it relates to HRQoL. Caregivers experienced a decline in HRQOL as compared to non-caregivers. Also, it was determined that younger caregivers were more likely to experience a decline in HrQoL compared to their older counterparts. As this study was not disease specific, the generalizability of these findings to the caregiving population increases. This study used a representative sample from the CDC's national BRFSS survey. This large representative sample has contributed to a better understanding of the public health impact of caregiving. Given the decline in HRQoL for a large number of caregivers, public policy should emphasize increasing the health of the nation's caregivers.

These findings also suggest that a caregiver's mental health is more affected than physical health by the caregiving duties. Other studies support these findings that caregivers had more of a decrease in psychological health compared to physical health (Pinquart & Sörensen, 2003) and caregivers have been reported to be at increased risk for depression and higher use of psychotropic drugs (Schulz, O'Brien, Bookwala, & Fleissner, 1995). There are many outcomes associated with reduced HRQoL of the caregiver. Literature suggests that if the caregivers' HRQOL is poor, the quality of the care the recipient receives might be lower and there is increased risk for physical abuse by the caregivers (Beach et al., 2005). Caregivers who have reduced HRQoL may be less able to provide care, which could increase care recipient's hospitalizations and stays at skilled care facilities. It also affects society economically because paid caregivers are used when informal caregivers are no longer able to offer care.

The literature on the development of the role of informal caregivers widely recognizes that protecting and promoting HRQoL of caregivers should be a priority for health professionals. There are several public health interventions that may improve caregivers' HRQoL, including providing paid personal care assistants (White House Conference on Aging, 2005), providing more ▶ education of caregivers to prepare them for their role as a caregiver (Scott, 2000), and increasing their ▶ social support (Markowitz et al., 2003). These public health interventions would entail a policy change to provide more services that assist in caregiving duties, such as the provision of paid personal care assistants. Education of caregivers might be useful – in prior research, caregivers who were found to be least prepared for their role as caregivers were found to have more problems maintaining their health. Increased social support has been found to have positive associations with caregivers' mental and physical health. Interventions on a public health scale will need to follow additional studies of caregiving with more specific measures of caregiving, the recipient, and the intensity of caregiving.

Many caregivers do need support in training and education, respite, and physical and mental health care. Such programs should provide outreach to caregivers facing specific stressful conditions, as not all caregivers experience negative consequences. Additionally, there should be adequate nursing interventions to support the informal caregivers. Caregivers treating care recipients that are terminally ill should receive more support from hospice services and help in respect of services needed. Health-care providers can also help by identifying caregivers who may be facing challenges with their caregiving duties

and provide them the appropriate resources. Health-care providers can guide the caregiver to multiple resources for support that include local and national support groups for caregivers, respite care, Internet sources, and community resources that may be available to assist with care delivery. Unfortunately, as caregivers devote much of their time in managing the needs of the care recipient, they often do not have the time to locate sources of support; therefore, these resources should be more directly available to the caregiver.

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Caregiving Hassles and Uplifts Scale

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Definition

The Caregiving Hassles and Uplifts Scale is a 110-item measure to assess the appraisal of caregiving events by caregivers.

Description

The Caregiving Hassles and Uplifts Scale (Kinney & Stephens, 1987) is a 110-item measure to assess the appraisal of caregiving events by caregivers. Each item describes an event associated with caregiving. Conceptualized within the transactional framework of stress (Lazarus & Folkman, 1984), this scale differs from other scales on caregiving stress in that it focuses on the day-to-day experience of caregiving (Kinney & Stephens, 1989a).

The scale includes caregiving events in four domains: Limitations in Activities of Daily Living of Care Recipients (comprised of 12 items, such as helping care recipient(s) with bathing), Cognitive Status of Care Recipients (comprised of 20 items, such as care recipients' forgetfulness), Behavior of Care Recipients

(comprised of 53 items, such as the care recipient hiding things), and Instrumental Aspects of Caregiving (comprised of 25 items, such as preparing meals for the care recipient).

Kinney and Stephens later developed a revised Caregiving Hassles Scale (Kinney & Stephens, 1989a). The revised scale consists of 42 items and does not measure uplifts. Kinney and Stephens decided not to include uplifts in the revised scale because uplifts were not strongly associated with well-being (Kinney & Stephens 1989a). The Caregiving Hassles Scale was developed for use with caregivers of persons with dementia and has five domains: Hassle Assisting With Basic Activities of Daily Living (comprised of 9 items, such as giving medications to care recipient), Hassle Assisting with Instrumental Activities of Daily Living (comprised of 7 items, such as preparing meals of care recipient), Hassle With Care-Recipient's Cognitive Status (comprised of 9 items, such as care recipient's forgetfulness), Hassle With Care-Recipient's Behavior (comprised of 12 items, such as care-recipient not cooperating), and Hassle With Caregiver's Support Network (comprised of five items, such as not receiving caregiving help from friends).

Format

Respondents are presented with a description of hassles and uplifts before being introduced to scale items (note: the revised scale omits information on uplifts). The description reads:

"What are caregiving hassles and uplifts? Hassles are irritants-things that annoy or bother you; they can make you upset or angry. Uplifts are events that make you feel good; they can make you joyful, glad or satisfied. Some hassles and uplifts occur on a fairly regular basis and others are relatively rare. Some have only a slight effect, while others have a strong effect. This questionnaire lists things that can be hassles and uplifts in day-to-day caregiving. You will find that during the past week some of these things will have been only a hassle for you and some will have been only an uplift. Others will have been both a hassle and an uplift" (Kinney & Stephens, 1989a).

Respondents are instructed to first denote if each item occurred in the past week. If so, respondents are asked to indicate if the event was a hassle, an uplift, both, or neither. Caregivers rate the intensity of the hassle or uplift of each event on a four-point scale: "it wasn't," "somewhat," "quite a bit," or "a great deal."

Scoring and Psychometrics

Caregiving Hassles and Uplifts Scale

Overall intensity of caregiving hassles and/or uplifts can be computed for the entire scale as well as for individual domains. Higher scores indicate greater magnitude of the caregiver's appraisal of the caregiving event as a hassle/uplift.

Test-retest reliability was examined in 60 caregivers to family members with Alzheimer's disease (Kinney & Stephens, 1989b). Coefficients for respondents' total hassles and total uplifts scores after 1 day were .85 and .89, respectively. Reliability of hassles subscales ranged from .73 to .91; reliability of uplifts subscales ranged from .71 to .90. Total hassles scores and total uplifts scores had a correlation coefficient of .07 (Kinney & Stephens, 1987, 1989b).

Caregiving Hassles Scale

Overall intensity of caregiving hassles can be computed for the entire scale as well as for individual domains. Higher scores indicate greater magnitude of the caregiver's appraisal of the caregiving event as a hassle.

Test-retest reliability was examined in 60 primary caregivers to family members with dementia (Kinney & Stephens, 1989a). Coefficients were determined for the full scale (.83) and individual domains (.86 for Basic Activities of Daily Living, .71 for Instrumental Activities of Daily Living, .80 for Care-Recipient's Cognitive Status, .87 for Care-Recipient's Behavior, and .66 for Caregiver's Support Network). Internal consistency was also evaluated. Coefficients were determined for the full scale (.91) and individual domains (.79 for Basic Activities of Daily Living, .75 for Instrumental Activities of Daily Living, .82 for Care-Recipient's Cognitive Status, .89 for Care-Recipient's Behavior, and .74 for Caregiver's Support Network).

Construct validity was examined by comparing caregivers' reports of care recipients' physical limitations, irresponsible behavior, and cognitive confusion on the London Psychogeriatric Rating Scale (LPRS; Hersch et al., 1978) with their scores in the domains of Basic Activities of Daily Living, Care-Recipient's Cognitive Status, and Care-Recipient's Behavior (Kinney & Stephens, 1989a). Correlations between Caregiving Hassles Scale and associated items on the LPRS were significant for Basic Activities of Daily Living ($r = .44$, $p < .001$) and Care-Recipient's Behavior ($r = .31$, $p < .02$). Kinney and Stephens (1989a) also assessed construct validity by examining the relationship between hassles and measures of well-being indicating outcomes of stress. Behavior hassles had the strongest negative associations with caregiver well-being, followed by cognitive and support network hassles (Kinney & Stephens). Hassles associated with Basic Activities of Daily Living and Instrumental Activities of Daily Living were not associated with well-being (Kinney & Stephens 1989a).

Cross-References

- ▶ Activities of Daily Living (ADL)
- ▶ Caregiving

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Caregiving Outcomes

- ▶ Bakas Caregiving Outcomes Scale

Caregiving Outcomes Measurement

- ▶ Bakas Caregiving Outcomes Scale

Caregiving Questionnaire

- ▶ Bakas Caregiving Outcomes Scale

Caregiving Scale

- ▶ Bakas Caregiving Outcomes Scale

Caregiving, Burden

- ▶ Caregiver, Burden

Caregiving, Family

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Synonyms

Caregiver; Family; Family caregiving; Informal caregiving

Definition

Family caregiving refers to unpaid activities carried out by family member or close friends to

meet the patient's multidimensional needs, including treatment monitoring; treatment-related symptom management; emotional, financial, and spiritual support; and assistance with personal and instrumental care.

Description

An illness affects not only the quality of life of individuals with the disease but also that of their family members and close friends who care for the patients. The stress of caregivers is defined as a feeling experienced when a person thinks that the demands of caregiving exceed the personal and social resources the individual is able to mobilize (Lazarus & Folkman, 1984). The caregiver role of family members incorporates diverse aspects involved in dealing with an illness of the relative. This role includes providing the patient with cognitive/informational, emotional, financial/legal, daily activity, medical, and spiritual support, as well as facilitating communication with medical professionals and other family members and assisting in the maintenance of social relationships (Kim & Given, 2008). All of these aspects can contribute to caregivers' stress when they perceive it difficult to mobilize their personal and social resources to carry out each of the caregiving-related tasks. Although most research in this area has focused on the negative experiences of providing care, a number of studies have also reported on the benefits of taking care of family members who are ill. Family members have reported benefit finding in providing care, posttraumatic growth, an improved sense of self-worth, and increased personal satisfaction (Folkman, Chesney, Cooke, Boccellari, & Collette, 1994; Kim, Schulz, & Carver, 2007; McCausland & Pakenham, 2003).

The degree to which family caregivers have negative and positive experiences in caregiving may depend on the gaps between resources available for caregiving and the caregiving demands, unmet needs in caregiving that affect their ability to care for the patient, which also relates to their own quality of life. Therefore, identifying such gaps should be the initial step in the development of programs designed to reduce caregivers' stress and enhance their quality of life.

In addition to assessing the diverse aspects of caregiving experience and caregivers' unmet needs, understanding how caregivers' experience varies across the illness trajectory is an importance concern (Kim, Kashy, Spillers, & Evans, 2010). For example, in the early phase of caregivership, caregivers' stress experience is often associated with providing informational and medical support to the patients. During the remission phase, dealing with uncertainty about the future, fear that the disease may come back, the financial burden of extended treatment needs of the patients, and changes in social relationships are major sources of caregivers' stress. After the death of the patients, spiritual concerns and psychological and physical recovery efforts from caregiving strain are the challenges caregivers face.

Another important aspect of caregivers stress is their own unmet needs – things that are not directly related to caring for the patient but represent important personal needs to the caregivers. That is, in addition to caring for the individual with an illness, family caregivers likely have responsibilities for self-care and care for other family members that may have to be set aside or ignored in order to carry out the caregiver role.

This complex construct of caregiver stress has been associated with caregivers' demographic characteristics (Kim et al., 2010; Pinquart & Sörensen, 2003, 2005). For example, younger caregivers have reported greater stress in providing psychosocial, medical, financial, and daily activity support during the early phase of the illness trajectory. During the remission years after the illness onset, however, younger caregivers have reported greater stress only in daily activity. Gender has been also an important factor. Female caregivers have reported greater stress from dealing with psychosocial concerns of the patients, other family members, and themselves. Ethnic minorities tend to report lower levels of psychological stress but greater levels of physical stress from caregiving. Studies have found mixed associations of

caregiver stress to other demographic characteristics, such as education, income, and employment status.

Perceived level of stress from providing care has been significantly related to the caregivers' quality of life, after taking into consideration the variations in caregiving stress related to the demographic characteristics mentioned above (Kim et al., 2010; Pinquart & Sörensen, 2003). Caregivers who reported higher levels of psychosocial stress from caregiving have shown poorer mental health consistently and strongly across different phases of the illness trajectory. Caregivers' poorer mental health has also been related to higher levels of stress from meeting the medical needs of the patients during the early phase of illness, whereas during remission, poorer mental health has been related to financial stress from caregiving.

With regard to the self-reported physical health of the caregivers, caregivers' perceived stress has been a fairly weak contributor beyond contributions of demographic factors (Kim et al., 2010; Pinquart & Sörensen, 2003). However, the physical burden of caregiving, documented in objective measures, is considerable. For example, compared with matched non-caregivers, caregivers for a spouse with dementia report more infectious illness episodes, have poorer immune responses to influenza virus and pneumococcal pneumonia vaccines (Glaser, Sheridan, Malarkey, MacCallum, & Kiecolt-Glaser, 2000), show slower healing for small standardized wounds, have greater depressive symptoms, and are at greater risk for coronary heart disease (Glaser et al., 2000; Vitaliano, Zhang, & Scanlan, 2003). A recent meta-analysis (Vitaliano et al., 2003) concluded that compared with demographically similar non-caregivers, caregivers of dementia patients had a 9 % greater risk of health problems, a 23 % higher level of stress hormones, and a 15 % poorer antibody production. Moreover, caregivers' relative risk for all-cause mortality was 63 % higher than non-caregiver controls.

Immune dysregulation has been identified as a key mechanism linking caregiving stress to physical health. Chronically stressed dementia caregivers have numerous immune deficits compared to demographically matched non-caregivers, including lower T cell proliferation, higher production of immune regulatory cytokines (interleukin-2 [IL-2], C-reactive protein [CRP], tumor necrosis factor-alpha [TNF-α], IL-10, IL-6, D-dimer), decreased antibody and virus specific T-cell responses to influenza virus vaccination, a shift from a Th1 to Th2 cytokine response (i.e., an increase in the percentage and total number of IL10+/CD4+ and IL10+/CD8+ cells) (Segerstrom & Miller, 2004; Vitaliano et al., 2003). A 6-year longitudinal community study (Kiecolt-Glaser et al., 2003) documented that caregivers' average rate of increase in IL-6 was about four times as large as that of non-caregivers. The mean annual change in IL-6 among former caregivers did not differ from that of current caregivers, even several years after the death of the spouse. There were no systematic group differences in chronic health problems, medications, or health-relevant behaviors that might otherwise account for changes in caregivers' IL-6 levels during the 6 years of the study period (Kiecolt-Glaser et al.).

Another mechanism linking caregiving stress to poor physical health is lifestyle behaviors. Family members with chronic strain from caring for dementia patients increase health-risk behaviors, such as smoking and alcohol consumption (Carter, 2002). They also get inadequate rest, inadequate exercise, and forget to take prescription drugs to manage their own health conditions, resulting in poorer physical health (Beach, Schulz, Yee, & Jackson, 2000; Burton, Newsom, Schulz, Hirsch, & German, 1997).

A small number of studies have found that spousal caregivers reported similar levels of existential experience from their partner's illness as the patient did and also had personal growth experiences years after their partner's illness diagnosis (Manne, Babb, Pinover, Horwitz, & Ebbert, 2004; Manne et al., 2004; Weiss, 2002; Folkman et al., 1994; Kim et al., 2007; McCausland & Pakenham, 2003). Furthermore, various domains of the experience of benefit finding among caregivers were uniquely associated with life satisfaction and depression.

For example, coming to accept what happened and appreciating new relationships with others related to greater adaptation. Becoming more empathic toward others and reprioritizing values related to greater symptoms of depression (Kim et al., 2007).

Although survivorship ends at the death of the person with the disease, the caregiver's life continues. Another group to be considered is bereaved caregivers. The death of a close family member is one of the most stressful of life events (Holmes & Rahe, 1967), so not surprisingly, bereavement in general has been widely studied for several decades (Parkes, 1998; Stroebe & Stroebe, 1993). Caregiving stress has a negative impact on the *psychological* and *physical* health of caregivers, even increasing mortality (House, Landis, & Umberson, 1988; Schulz & Beach, 1999). Identifying particularly vulnerable family caregivers before the relative's death based on the presence of a dysfunctional family system (Chan, O'Neill, McKenzie, Love, & Kissane, 2004; Kissane, Bloch, McKenzie, McDowall, & Nitzan, 1998) and the demographic characteristics previously mentioned has helped in interventions to prevent these caregivers from experiencing severe levels of grief and bereavement symptoms at 4 months (Kelly et al., 1999), 6 months (Maciejewski, Zhang, Block, & Prigerson, 2007), and 12 months after the loss (Rossi, Zotti, Massara, & Nuvolone, 2003). In addition, an intervention designed to provide psychosocial support and information to assist in the bereavement process for family members and friends of recently deceased cancer patients has demonstrated its efficacy in improving their QOL at 3 months after completion of the eight-session psychoeducational group (Goldstein, Alter, & Axelrod, 1996).

The findings have implications for helping clinicians to identify caregivers who are at risk for subsequent problems and to provide interventions through which the caregivers might avoid experiencing severe depression resulting from caregiving or complicated grief after the loss of the care recipient. Despite the potential benefit, few psychosocial and behavioral interventions to enhance the quality of life of caregivers other than caregivers of dementia patients have been developed. Interventions that emphasize education and information about medical treatment and disease processes (Ferrell, Grant, Chan, Ahn, & Ferrell, 1995; Grimm, Zawacki, Mock, Krumm, & Frink, 2000), focus on improving problem-solving skills (Nezu, Nezu, Felgoise, McClure, & Houts, 2003; Toseland, Blanchard, & McCallion, 1995), and provide information along with psychological counseling (Barg et al., 1998; Bultz, Speca, Brasher, Geggie, & Page, 2000; Kozachik et al., 2001; Northouse et al., 2002) appear to be successful in decreasing caregiving stress and improving the QOL of caregivers as well as promoting patients to return to their usual healthy life (see Pinquart & Sörensen, 2003). Inclusion of family members in such psychosocial interventions and delivering the intervention to targeted subgroups of family might prove beneficial in minimizing the adverse impact of illness and helping persons touched by the illness maximize the positive experiences from the illness in the family.

The quality of life of family caregiver is a multidimensional construct that varies in nature across the illness trajectory. Several approaches can be fruitful for systematic understanding of the quality of life of family caregivers. First, it can be useful identifying certain caregivers by their demographic characteristics as a vulnerable subgroup to greater caregiving stress. Issues about examining survivors' and their caregivers' QOL separately involve the conceptual pitfall of ignoring mutuality in QOL between care recipients and care providers as well as statistical violation of the assumption of independence in unit of analysis. Guided by theory-driven research questions and employing proper analytic strategies (e.g., Actor Partner Interdependence Model (Kenny, Kashy, & Cook, 2006) and Multilevel Modeling (Bryk & Raudenbush, 1992) will help advance our understanding of the impact of illness on the family. Another problem is that although it is the general consensus that major illness affects not only the individual but also family and friends, it remains unknown whether such an impact is equally significant across different ethnic groups.

In summary, accumulating evidence has supported the concept that illness affects not only the patients but also their family members. Our review of literature on the quality of life of family caregivers at the acute and mid- to long-term trajectory of the illness and the bereavement phase provided solid evidence about the psychological impact of illness on family caregivers. However, theoretically and methodologically rigorous research on various aspects of the family's quality of life, including physical, spiritual, and behavioral adjustment to illness in the family, remains sparse. Family-based interventions across trajectory of the illness are also needed.

Cross-References

- Activities of Daily Living (ADL)
- Alzheimer's Type Dementia
- Bereavement
- Caregiver Quality of Life
- Caregiver, Self-Efficacy
- Caregiving
- Caregiving, Burden
- Distress
- End-of-Life Care
- Family Caregiving
- Multilevel Analysis
- Need Fulfillment
- Palliative Care
- Personal Growth
- Physical QOL
- Quality of Life (QOL)
- Social Support
- Spirituality
- Stress

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Caregiving, Self-Efficacy

▶ Caregiver, Self-Efficacy

CarerQol Instrument

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Synonyms

Caregiver quality of life

Definition

CarerQol is an instrument to measure care-related quality of life of informal caregivers.

Description

The CarerQol instrument consists of two parts: a description of the care situation on seven burden dimensions (CarerQol-7D) and a valuation component in terms of general quality of life using a visual analogue scale (CarerQol-VAS). VAS is also used in the ▶ EuroQol instrument to measure subjective health-related quality of life.

The CarerQol-7D includes two positive dimensions of care:

- Fulfillment with carrying out care tasks
- Support with carrying out care tasks (e.g., from family, friends, neighbors, acquaintances) and five negative dimensions:
- Relational problems with care recipient (e.g., demanding, communication problems)
- Problems with own mental health (e.g., stress, fear, depression, concern for future)
- Problems combining care tasks with daily activities (e.g., household activities, work, study, family, and leisure activities)
- Financial problems because of caring tasks
- Problems with own physical health (e.g., often sick, tiredness, physical stress)

Response categories are the following: "no," "some," and "a lot of." Score for two positive dimensions of care is reversed ("fulfillment" and "support") before summing all item to yield a total score (0–14 where 0 represents no caregiving burden and 14 represents high caregiving burden).

The CarerQol-VAS indicates current happiness, "the degree to which an individual judges the overall quality of life-as-a-whole favourably" (Veenhoven, 1984). A horizontal visual analogue scale (VAS) response ranges from "completely unhappy" (0) to "completely happy" (10).

Some psychometric properties of the CarerQoL have been tested in the Netherlands (n = 175) which showed the feasibility and construct validity to be good and the clinical validity discriminated well between groups (Brouwer, van Exel, van Gorp, & Redekop, 2006). Another Dutch study (n = 230) reported positive (negative) dimensions of CarerQol-7D were positively (negatively) related to CarerQol-VAS with moderate strength of convergent validity (Hoefman, van Exel, Looren de Jong, Redekop, & Brouwer, 2011a). A US study of 65 caregivers of children with craniofacial malformations (Payakachat, Tilford, Brouwer, van Exel, & Grosse, 2011) reported a depression measure (CES-D/the center for epidemiologic studies depression scale) to be strongly correlated with both CarerQoL-7D (0.6549) and the CarerQoL-VAS (−0.7426). Health utilities index (HUI3) was also found to be strongly correlated with CarerQoL-7D (−0.6011) and the CarerQoL-VAS (0.6968) (Payakachat et al., 2011).

A systematic review by Deeken, Taylor, Mangan, Yabroff, and Ingham (2003) also included other caregiver-related quality of life measures: Caregiver Quality of Life Index which involved 4 items visual analogue scored 0–100 (McMillan & Mahon, 1994), Quality of Life Tool which included 20 items visual analogue scale 0–100 (Ferrell, Grant, Chan, Ahn, & Ferrell, 1995), and Caregiver Quality of Life Index – Cancer which consisted of 35-items 5-point scale (Weitzner, Jacobsen, Wagner, Friedland, & Cox, 1999).

Cross-References

- ▶ Health-Related Quality of Life Measures
- ▶ Quality of Life (QoL)

References

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Caricatures

► Humor

Carnivals

► Community Festivals

Caruso Emotional Intelligence Test (MSCEIT)

► Measuring Emotion Recognition Ability

Casual Employment

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Synonyms

Atypical employment; Contingent employment; Flexible employment; Irregular employment; Marginal employment; Nonpermanent employment; Non-regular employment; Nonstandard employment; Precarious employment; Temporary employment

Definition

The terms "casual" and "employment" have their own distinct vocabulary definition, but there is no consistent and a globally accepted definition of "casual employment." Its definition is marked by conflicts between linguistic, regulatory, and contractual meanings. Because casual employment departs substantially from typical standard employment arrangements, e.g., permanent or regular employment, casual employment at times refers to the so-called nonstandard employment arrangements. If we focus on its essence, casual employment is a sort of employment type that is characterized by limited duration, short-term, irregular, insecure, and uncertain employment. As a result, casual workers are often on standby to work without fixed work hours or attendance arrangements. Moreover, casual workers are mostly not entitled to regular employment benefits such as health insurance and paid leaves (Campbell & Burgess, 2001; De Cuyper et al., 2008; De Wile, 2005; Houseman & Osawa, 1995).

Description

Various Terms and Heterogeneity

As opposed to the so-called standard employment which is on the full-time and continuing contract

basis, casual employment belongs to nonstandard employment which is a collective term for such employment arrangements like "► temporary employment," "contingent employment," "► precarious employment," "nonpermanent employment," "on-call work," "atypical employment," "► part-time work," "fixed-term work," or "marginal employment." Because of the heterogeneity of nonstandard employment arrangements, it is not surprising that there is no globally accepted definition of casual employment.

For the sake of consistency, some international organizations or countries which stress employment regulations have offered official definition of casual employment, including definition by OECD, European Union, ► Canada, and ► Australia.

Causes and Recent Reemergence

Casual employment is by no means a new employment arrangement. Rather, it has emerged along with other employment arrangements since Industrial Revolution that shaped the modern employment prototype of industrial and labor relationships. In the past decades, researchers and labor unions in Western societies started paying attention to the reemergence of casual employment since the early 1980s. The onset of reemergence in casual employment since the early 1980s was closely related to deindustrialization process and thus the decline of manufacturing industries in Western countries and Japan. The neoliberals argue that state-led developmental policies are economically inefficient, leading to decreasing productivity and corporate profits. As a result, numerous calls for lifting national barriers and deregulation of production, mostly from employers, appeared in the name of pursuit and promotion of labor market flexibility.

As a result, recent casual employment is initially driven by employers of modern enterprises through moving their manufacturing plants to developing countries in search of cheap land and labor, in the hope of (1) increasing employment flexibility, (2) reducing administrative complexity, (3) promoting production innovation in origin country, and (4) decreasing labor costs in destination country. In addition, the need for casual employment is also driven by the demand of employers as a way of protection against fluctuations in labor demand that are embedded in fluctuation of consumer demand due to business cycle.

Some researchers have argued that factors of labor supply are unlikely to account for the reemergence of recent casual employment. But in the broad context of global capitalism perspective, changing demographic structure is crucial in accounting for increasing incidence and prevalence of casual employment in the world. In terms of changing demographic structure, developed countries (DCs) tend to be associated with a more ageing population structure than less developed countries (LDCs). It suggests that labor-intensive work and Fordism-type manufacturing are more suitable to thrive in the LDCs than the DCs, leading to deindustrialization in the DCs.

Another crucial factor affecting global labor supply can be attributed to the end of Cold War during the period of the late 1980s and early 1990s. The end of Cold War enables a huge stock of cheap and younger human resources being integrated into the global capitalism that in turn has an effect of expanding the demand of employers in pursuit of cheap land and labor and thus accelerating global capital flows and increasing incidence of casual employment in the DCs. Since the mobility of transnational capital and the migration of human capital are causally interrelated, casual workers, mostly migrant workers of internal migration, are also seen to increase in both number and incidence in the LDCs. In other words, factors of labor supply originated from geopolitical and institutional changes do play a crucial role in accelerating reemergence of casual employment in the past two decades.

Take Eastern Asian countries as example, one distinctive change in the labor and industrial relationships in Japan was characterized by gradual collapse of lifetime employment system in the early 1990s. Houseman and Osawa (1995) noted that the rising incidence of temporary and part-time employment in Japan was initially driven by factors of sharp appreciation of currency, ageing labor force, increasing labor costs, and

decreasing employment flexibility. These led to Japanese industrialists to relocate manufacturing plants to other countries, particularly neighboring Asian countries.

Similar development started becoming salient in Hong Kong (Chiu, So, & Tam, 2008), Korea (Kim, Muntaner, Khang, Paek, & Cho, 2006), and Taiwan (Lin, 2007) in the mid-1990s. Meanwhile, massive rural-to-urban migration happens in China in conjunction with massive inflow of foreign direct investments. Voluminous Chinese internal migrants are hired in urban areas/industrial belts where they serve as main supply source of casual workers (Chan & Zhang, 1999).

Characteristics, Consequences, and Policy

Many empirical researches have suggested that casual employment is not only associated with individual short-run and long-run wage losses but also tends to be associated with personal downward career mobility and degradation of socioeconomic status. Thus, a number of researches on casual employment focus on individual behavioral response to work stress, attitudes of ▶ organizational commitment, perception of well-being and equality, and psychological behavior among casual workers (e.g., De Cuyper et al., 2008; De Wile, 2005; Feldman, Doerpinghaus, & Tumley, 1994). A comprehensive review research by De Cuyper et al. (2008) summarizes three broad branches of theoretical framework for investigating the unfavorable attitudes, poor well-being, and undesirable behaviors among casual workers. They include work stress theory, ▶ social comparison theory, and social exchange theory.

Empirical findings suggest that casual employment is closely related to job separation and segregation from organization that have an effect of decreasing the occupational prestige of individual worker career in a non-negligible way. In particular, casual workers are more subject to involuntary job turnover. The resulting negative psychic impact on casual workers tends to be persistent and cumulative (De Cuyper et al., 2008; De Wile, 2005). Moreover, those individuals being involuntarily displaced from the previous job tend to be employed in occupations associated with lower prestige.

It is also found that casual workers are rather subject to a much higher incidence of involuntary job turnover due to economic cycle and business shutout/shrinkage and layoff. Because casual workers are disadvantaged in the labor market in nature, they consequently are associated with higher likelihood of mismatching the new manpower demand of the labor market. Casual workers tend to have a higher level of difficulty than their permanent counterparts after initiating a new job search process and are a subgroup of the labor force at high risk of becoming the unemployed (Lin, 2007).

As a result, casual employment has significant effect on the ▶ quality of life among casual workers. The most noteworthy impact of casual employment on the quality of life of casual workers is related to ▶ job insecurity. It is found that casual workers and their dependents are more prone to be materially deprived than standard employees as a whole (De Wile, 2005; MacPhail & Bowles, 2008). Moreover, the embedded economic insecurity in casual employment is found to widen social inequality that tends to vary by gender, race, ethnicity, and immigration status (Fuller & Vosko, 2008). The other noteworthy impact of casual employment on the quality of life is reflected from the health issues of casual workers (e.g., Kim et al., 2006; Nollen, 1996; Rodriguez, 2002). A general finding regarding the impact of casual employment on health is that casual workers are more likely to be mentally and physically ill compared to standard employees. This situation will adversely affect the job performance of casual worker in turn, leading to a work-health vicious cycle among casual workers.

In short, marginalization, insecurity, and instability are the most important characteristics of casual employment. Policy measures designed for mitigation of adverse consequences associated with casual employment center around the pivot of constructing economic security and employment stability. To achieve this goal, various policy designs have been proposed. The most noteworthy include the increase of minimum wage level, the promotion of employability, the promotion of financial access and education training programs

to acquire new work skills, the allowance of regulations being applied to all workers regardless of contract status, the promotion of job transition from casual to regular employment, the promotion of access to medical system, and provision of health care (Acharya, 2009; Burgess, Campbell, & May, 2008; MacPhail & Bowles, 2008).

Cross-References

- ▶ Deprivation
- ▶ Flexicurity
- ▶ Health Inequalities
- ▶ Stress
- ▶ Temporary Employment
- ▶ Unemployment

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Casual Sex

- ▶ Family and Individual Factors Associated with Risky Sex

Casual Sex and the Quality of Life

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Synonyms

Anonymous sex; Booty calls; Chance encounters and qol; Friends with benefits; Fuck-buddy sex; Hookups and quality of life; No strings attached sex; One-night stands; One-time sexual encounters; Promiscuous sexual encounters, Sex in casual relationships

Definition

As of yet, there is no consensus on the definition of casual sex. Various researchers have defined this activity as one-time sexual encounters, sex in

casual relationships, or as the vaguely defined brief, "promiscuous" sexual encounters. While none of the proposed definitions are perfect, the following definition can be used as a decent stating point. Casual sex is a person mindfully engaging in sexual activities (such as mutual stimulation, oral sex, penile-vaginal intercourse, or anal intercourse) outside of a "traditional" and "formal" relationship (dating, marriage), without a "traditional" reason (such as ▶ love, procreation, or commitment) for doing so. Participants in said encounters may be total strangers, acquaintances, casual friends, or even close friends (Manning, Giordano, & Longmore, 2006).

Description

Available evidence suggests that among young Americans, casual sex is common. On today's college campus, "hooking up" is considered a normal sexual experience (Garcia & Reiber, 2008; Jonason, Li, & Richardon, 2010). Over three-quarters of all college students report at least one hookup (Paul & Hayes, 2002). Many have experienced more. Among surveyed sexually active 12–21-year-olds, a majority participated in casual sex at least once in the previous year, many with a friend or former romantic partner. These numbers appear to hold regardless of gender, race, ethnicity, or educational status.

Previously, however, males were more likely than females to report having engaged in sexual activity without being romantically or emotionally involved with their partners and reported more casual sex partners than did females (Barash & Lipton, 2002). For example, in Clark and Hatfield's (1989) now famous "Will you go to bed with me?" study, research confederates approached reasonably attractive students on the Florida State Campus and asked if the student would go on a date with the confederate, go back to the confederate's apartment, or have sex with the confederate. Roughly equal numbers of males and females agreed to the date request (56 % of males and 50 % of females). Then the genders diverged; while 69 % of males agree to return to the confederate's apartment, only 6 % of females agreed. No females agreed to the sex request, whereas 75 % of males did so.

These gender disparities can be explained in a number of ways. Males may have reported less emotional attachment than females because one partner may see the sexual tryst as a prelude to something more, whereas the other partner may see it as a tryst and nothing more. Additionally, in general, males tend to overestimate their number of sexual partners, while females tend to underestimate theirs (Alexander & Fisher, 2003). Regardless of the reason for these previously reported gender differences, more recent studies indicate that roughly equal numbers both males and females engage in casual sex (Oliver & Hyde, 1993). This is not surprising as the sexual attitudes of both groups are becoming increasingly similar and there is a link between sexual attitudes and sexual behaviors. Additionally, with increasing age, interest in casual sex converges, with females' level of interest remaining consistent and males' level of interest diminishing to roughly the same level as females'.

Perhaps the reason so many males and females engage in casual sex is because they find it pleasurable – this is the primary reason that many report engaging in casual sex. Additionally, sexual desire, interest in sexual experimentation, and alcohol and drug use also factor into sexual motives for casual sex (Regan & Dreyer, 1999). However, some gender differences have emerged. Females report hoping that the sex will lead to a serious relationship (Meston & Buss, 2007), whereas males report hoping that the sex will lead to increased peer acceptance, status, and popularity. It is important to note that some studies have found both males and females hope that a hookup will lead to a traditional romantic relationship. It could be that young people are starting to view the hookup as the possible beginning of something more instead of an alternative to something more. It remains to be seen how realistic that hope is, and in fact, many of the same individuals who would like casual sex to lead to something more do not believe that it will. On the contrary, some individuals may seek out short-term sexual relationships because they fear more intimate ones

(Paul, McMabus, & Hayes, 2000). Additionally, females may participate in casual sex because they have been socialized to think that they are responsible for satisfying male sexual needs. In sum, the reasons for participating in casual sex may be as numerous as the participants themselves.

Similarly, there are many reasons why individuals might abstain from casual sex, such as religious prohibitions, concerns about one's reputation, fears of STIs (Sexually Transmitted Infections) and HIV (Human Immunodeficiency Virus) (Bogle, 2008), and, for heterosexual hookups, pregnancy concerns. In some cases, these risks can vary by the specific casual sexual activity in question; they can also vary by gender. Following a night of hooking up at another person's place, males return to their own rooms by doing "the stride of pride," whereas females do the "the walk of shame." Females also have more to fear in terms of sexual attacks and harm, which could explain why in the past females were more hesitant to engage in casual sex than were males.

When choosing to be sexually involved with a casual partner, both males and females are highly concerned with the attractiveness of their potential mates; however, males are willing to sacrifice many other personal qualities and risk much more than females are (Baumeister, Cantanese, & Vohs, 2001). If the potential partner is attractive and willing, almost nothing else is a deal breaker for the average male looking for a hookup; the same cannot be said for the average female.

Casual sex among young people is likely to co-occur with alcohol and drug use. However, this does not imply a causal link; in other words, we cannot say that drinking leads to casual sex. That being said, the participants themselves have indicated that drinking played a role in their decision to engage in casual sex by both lowering sexual inhibitions and making potential sex partners appear more attractive (the colloquialism "beer goggles"). Alcohol may also affect the quality of the sex. Many report that their worst casual sex experience involved alcohol. Other circumstances that may increase the likelihood of casual sex include situations where social constraints are suspended, like while on vacation, out of town, or during spring break.

Regardless of when, where, or why casual sex occurs, many in the general public have suggested that casual sex has negative implications for participants, both physical and psychological. While unprotected casual sex can lead to serious physical health problems such as STIs and HIV, as can unprotected noncasual sex, casual sex does not lead to lowered psychological health. When following cohorts of young people, casual sex participants were at no greater risk for psychological problems than nonparticipants and did not experience more mental health problems, and most participants did not regret their casual sexual experiences (Eisenberg, Ackard, Resnick, & Neumark-Sztainer, 2009). However, not every experience is positive. Feelings of confusion, regret, embarrassment, fear, uncertainty, and nervousness can accompany feelings of pleasurable, excitement, and arousal, particularly in encounters later described as bad hookups. There are also some gender differences in reactions to these bad hookups; while males and females are both glad the sex is finished and anxious to leave, males report experiencing more disappointment, whereas females report experiencing more regret. Females who engage in casual sex may also possess a tendency toward depression (Grello, Welsh, & Harper, 2006), whereas males who engage in casual sex report less depression than males who do not engage in casual sex. Given the sexual double standard that still exists in our culture, it is not surprising that males may experience more ▶ pleasure and less guilt from casual sex than do women. Additionally, males have more permissive and positive attitudes toward casual sex than do females, which could contribute to males experiencing less guilt than females.

Discussion

This area of research is still in its infancy, but its exploration has been spurred on by health concerns over the spread of HIV and STIs. It is important to note that most of the above

information is based on studies of heterosexual adolescents and young adults in Western, primarily college settings conducted by researchers interested in documenting the dangers of casual sex. The findings may not be applicable to older adults or those in non-Western settings. Interestingly, despite the expectation to elucidate the dangers of casual sexual activity, a surprising and overwhelming finding from most methodologically sound studies is that casual sex does not lead to negative psychological consequences. However, for those who engage in unprotected sex, negative physical consequences are certainly a very real danger. This is not to suggest that casual sex is without psychological risk; certainly many do experience negative outcomes, as do many in noncasual relationships.

The appeal (or lack thereof) of casual sex and its effects on the individual likely stem from the interaction of culture, social context, personal experience, and biological factors (such as gender) (Eagly & Wood, 1999; Wood & Eagly, 2002). Depending on one's perspective, this has the advantage or disadvantage of allowing for great individual variation in sexual behavior and the ramifications of said behavior. One important factor to consider is that humans are products of their culture. If an individual is part of a sexually restrictive culture that frowns upon or condemns casual sex, engaging in such a sexual tryst is likely to lead to negative consequences, be they social, moral, or physical, for the individual (Buss, 1989). It is not an overexaggeration to say that in a culture that highly values premarital chastity, engaging in casual sex even one time might render the individual unmarriageable and relegate that person to the status of permanent outcast in the family and community. On the other hand, if an individual is part of a sexually permissive culture in which casual sex is the normal, the ramifications of engaging in this behavior are likely to differ dramatically. Culture influences not only sexual behavior but also sexual attitudes, which are important in their own right and because they influence sexual behavior (Manning, Longmore, & Giordano, 2005). When the sexual attitudes of a culture or person become more permissive, so do the sexual behaviors.

Gender's influence on antecedents and consequences of casual sex is hotly debated. Evolutionary psychologists argue that different mating strategies have evolved in males and females due to the differing levels of investment each must contribute to pass along their genes. The argument is that it is to each individual's advantage to pass along his or her genetic makeup, but to ensure the survival of one's offspring, males and females have a different investment. As males are capable of producing many children with little effort, it should be to their advantage to engage in casual sex with any willing female of childbearing age. Conversely, females are capable of producing only one child per year and typically must invest a number of years in each child to ensure the child's survival. This could result in a female seeking casual sex for a variety of reasons, such as to obtain better genes for her offspring, to accrue resources, or to ensure that a number of potential fathers are tempted to defend and/or provide for her children. However, there are also a variety of reasons that females may avoid casual sex to ensure the survival of her offspring. While these theories are interesting, as of yet, they still lack rigorous scientific evidence.

Gender differences in casual sex may be better explained by cultural factors instead of biological ones (D'Emilio & Freedman, 1997). The more egalitarian the society, the smaller the gender differences in attitudes and behaviors are (Herold & Mewhinney, 1993; Petersen & Hyde, 2010). Additionally, in even the short time that sexuality has been studied scientifically (since roughly the 1940s), gender differences have decreased dramatically and, in some cases, to the point of nonexistence. This pattern can be seen in the research on casual sex behavior, with much of the older research finding larger gender differences but much of the newer research finding smaller differences (and, in some studies, no differences). Attitudes toward casual sex do still appear to differ by gender. However, as more females begin to engage in casual sex, their attitudes toward the activity

should become more permissive and become more convergent with the attitudes of males.

Time will likely provide the necessary evidence to determine whether biological or cultural factors are the more important determinants of casual sex behavior. If gender differences remain consistent, evolutionary theories gain in credibility, but if gender differences change, cultural and social factors will emerge prominent. As we wait the passage of time to solve this mystery, we must remember that time may also alter the ramifications of casual sex. If casual sex, which not long ago was taboo in our culture, is now the norm among young people, what might our future sexual evolution involve? Will casual sex become more common? Will society become less permissive and less tolerant of casual sex? It is almost impossible to predict. The only thing that can be predicted with certainty is that our sexual behaviors will continue to change.

Cross-References

- ▶ Sex Differences
- ▶ Sexual Motives and Quality of Life
- ▶ Sexual Satisfaction
- ▶ Sexual Satisfaction and Gender Differences

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Catchment

► Watershed(s)

Categorical Data

► Nominal Scales

Categorical Data Analysis

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Definition

Categorical data analysis is the analysis of data where the response variable has been grouped into a set of mutually exclusive ordered (such as age group) or unordered (such as eye color) categories.

Description

Categorical (or discrete) variables are used to organize observations into groups that share a common trait. The trait may be nominal (e.g., sex or eye color) or ordinal (e.g., age group), and, in general, the number of groups within a variable is 20 or fewer (Imrey & Koch, 2005). Most statistical procedures distinguish between independent, or explanatory, and dependent, or response, variables. For instance, an ► analysis of variance may be used to determine how a continuous response variable varies according to explanatory variable levels such as eye color. In contrast, categorical data analysis involves the statistical treatment of categorical response variables. Because the distributional assumptions for categorical variables are different from continuous variables, different analytic techniques are needed. Specific categorical data analytic techniques designed for ordinal variables cannot be used for nominal variables where category ordering is not a concern (Agresti, 2007).

History

The use of categorical data analysis began in the early 1900s by Karl Pearson and George Udny Yule (Agresti, 2007). Their approaches were different, however, leading to debates. Pearson argued that categorical variables were proxies for variables with an underlying continuous distribution. Yule argued that many categorical variables were essentially discrete (Agresti, 2007; Azen & Walker, 2011). Consequently, this led to two different approaches to summarize the association between two categorical variables. According to Pearson, the association could be approximated by the underlying continuum, while Yule developed a measure that did not assume an underlying continuum. The current view is that both Pearson and Yule are partially correct. Some categorical variables, especially ordinal level data, can be viewed as proxies for truly continuous variables; however, other variables, especially those that are nominal, cannot (Agresti, 2007; Azen & Walker, 2011). In addition to the controversy between Pearson and Yule, Ronald A. Fischer also critiqued Pearson's work and noted that Pearson's calculation for the degrees of freedom for two-way tables was incorrect (Agresti, 2007). And, although Fischer is known primarily for his contributions to other statistical areas, such as the analysis of variance, he did provide several other contributions to the area of categorical data analysis, such as his methods concerning the use of small sample techniques for categorical data analysis (Azen & Walker, 2011).

Probability Distributions

Categorical data analyses, like other types of inferential statistical techniques, require certain assumptions about the probability distribution of the response variable. For parametric techniques, such as linear regression analysis or analysis of variance, the response variable is assumed to have a normal distribution. The main

distributions for categorical data analysis are the binomial and multinomial distributions (Agresti, 2007). Probabilities associated with different combinations of events can be determined based on the distributions. The binomial distribution consists of a number of Bernoulli trials where each trial (1) has only one of two possible outcomes (e.g., success or failure), (2) has the same probability of the outcome, and (3) is independent, meaning the outcome of one trial does not depend on another trial (Agresti; Azen & Walker, 2011). For example, consider that hospital records show that of patients suffering from a specific disease, 70 % will have a decline in quality of life. Given each patient is considered an independent trial, the outcome is decline in quality of life (yes or no), and the known probability of a decline in quality of life (yes) in the population of patients is 70 %; the probability, based on the binomial distribution, that 5 of 10 randomly selected patients will experience a decline in quality of life is 10 % (Agresti, 2007) (see formula, page 4). The multinomial distribution is an extension of the binomial distribution when there are more than two possible outcomes. Consider the quality of life outcome where, instead of two outcomes (yes or no to decline in quality of life), there are three possible outcomes (decline, no change, and improved quality of life). The probability of any specific outcome, such as no change, is the same across all trials (patients). The sum of the probabilities for each outcome must equal 100 %. As with the binomial distribution, each trial is independent. Given the probabilities for decline (70 %), no change (20 %), and improved (10 %) quality of life, the probability that out of ten randomly selected patients, four patients would experience a decline, four patients would experience no change, and two patients would experience improved quality of life is 1 % (Agresti, 2007) (see formula, page 5). Other common distributions used in categorical data analysis include the hypergeometric and Poisson distributions (Azen & Walker, 2011).

In real life, the parameter estimates for the distributions are usually unknown. Parameter estimation and statistical inference are generally conducted on a sample instead of the population; therefore, estimation procedures are needed. Maximum likelihood, an estimation procedure commonly used in categorical data analysis, is an iterative process that selects parameter estimates that make the estimates more probable or likely than any other estimates, given the sample data and the distribution (Agresti, 2007). To make a statistical inference, a hypothesis test is conducted where a test statistic is computed and a corresponding p value is obtained. For a single proportion, there are several ways in which to construct the test statistic (Agresti). The statistic can be based on the binomial distribution (the exact test), but, for large samples, computation can be intensive, and the p value is more conservative, meaning that the statistical test gives more false negatives (Agresti). The test statistic can also be conducted using the normal approximation to the binomial distribution; however, larger samples are generally needed. Using the normal approximation method, the Wald test, the score test (a variation of the Wald test), and the likelihood ratio test statistics can be computed (Agresti).

Basic summaries of individual categorical variables may be accomplished in the form of frequencies and/or proportions of observations for each level of the category in question. When examining one categorical variable by one or more other categorical variables, the data may be displayed with a contingency table (Agresti, 2007). A contingency table, also known as cross tabulation, is a statistical table in a matrix format that displays the observed frequencies, or counts, of the levels of one categorical variable classified by levels from one or more other categorical variables. For example, the simplest 2×2 contingency table (or two-way table with two levels for each variable) showing the cross classification of sex (male, female) by quality of life (good, poor) would have two rows to represent the male and female levels and two columns to represent

Categorical Data Analysis, Table 1 Classification of quality of life by sex

	Quality of life		
Sex	Good	Poor	Total
Male	200	80	280
Female	140	65	205
Total	340	145	485

Categorical Data Analysis, Table 2 Measures for the magnitude of the association between categorical variables

Measure	Variable level	Range
Phi coefficient	Dichotomous	−1 to 1
Kappa statistic	Dichotomous	0 to 1
Tetrachoric correlation[a]	Dichotomous	0 to 1
Cramer's V	Nominal	0 to 1
Polychoric correlation[a]	Ordinal	−1 to 1
Extended kappa	Ordinal	0 to 1

[a]Assumes underlying continuous distribution

the good and poor (see Table 1). The intersection of a column and row is called the "cell" and corresponds to the specific row, column combination level of each variable. As shown in the table, the frequency for females with a good quality of life is 140. Other concepts related to the contingency table include the joint, marginal, or conditional probabilities. The joint probability is the probability associated with each cell, and the sum of the probability for all the cells must equal 1. In the example, the joint probability for males with a good quality of life is 0.41 (=200/485). The marginal probability represents the sum of the cell probabilities in the respective rows or columns (Agresti, 2007). The marginal probability overall for a poor quality of life is 0.30 (=145/485). The conditional probability, particularly useful when one of the variables is a response variable, is the probability associated with the response, given a specific level of the explanatory variable. In this example, the probability of a good quality of life, given the sex is male, is 0.71 (=200/280).

Associations and Statistical Inference

In categorical data analysis, associations between response and explanatory variables that are both categorical are typically of interest. The ▶ odds ratio can be used to evaluate the strength of the association between two categorical variables in a 2×2 contingency table or a 2×2 section of a larger contingency table (Agresti, 2007). If there is no association, the two variables are said to be independent, meaning the level of one variable does not depend on the level of the other variable. In the above example, is quality of life associated with sex? By knowing sex, can quality of life be better estimated than by not knowing sex? The estimated odds of males having a good quality of life is 1.16 times [=(200*65)/(80*140)] the odds for females, meaning the odds for a good quality of life were 16 % higher for males than females. Other measures, although not an exhaustive list, used to assess the magnitude of the association include phi coefficient, the tetrachoric and polychoric correlation coefficients (Nunnally & Bernstein, 1994), and the kappa and extended kappa statistics (Cohen, 1960, 1968) (see Table 2).

Statistical inference can be conducted to test the association between two categorical variables using the Pearson's chi-square test of independence and the likelihood ratio statistic (Agresti, 2007). Extended Mantel-Haenszel statistics can be used to test for linear trends when one or both variables are ordinal (Imrey & Koch, 2005).

Categorical data analysis may also extend to more complex associations. The Cochran-Mantel-Haenszel test can be used to investigate the association between two variables while stratifying by one or more other variables (Imrey & Koch, 2005). Log-linear analyses, based on the generalized linear model, can be used to investigate associations among more than two nominal or ordinal categorical variables; however, log-linear models do not assume a response-explanatory relationship. For example, log-linear models can be used to model patterns of agreement among raters (Agresti, 1992).

Other generalized linear modeling procedures, for example, binary, ordinal, or multinomial ▶ logistic regression, accommodate continuous explanatory variables. Poisson regression analysis accommodates response count data which follow a Poisson distribution.

Summary

Categorical data analysis began early in the 1900s with strong theoretical advances in the mid-1900s (Agresti, 2007). The analytic procedures, therefore, are considered to be relatively recent (Agresti; Azen & Walker, 2011). Developing statistical techniques to analyze categorical data are currently underway, that is, modeling of clustered categorical data (Agresti, 2007) This section, therefore, covers only a selection of the categorical data analysis procedures that are widely used. However, there are other techniques not mentioned that may be more appropriate after looking at the questions and data distribution.

Cross-References

- ▶ Analysis of Variance
- ▶ Inference, Statistical
- ▶ Logistic Regression
- ▶ Odds Ratio
- ▶ Poisson Models

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Categorical Judgement Scales

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Synonyms

Stimulus-centered scale

Definition

A categorical judgement scale is a scale, used in survey questions, which reports variation in the stimuli or the items along a measurement dimension.

Description

A judgement scale, also known as ▶ stimulus-centered scale, reports variation in the stimuli or the items along the measurement dimension (Cox, 1980; Dawis, 1987; Torgerson, 1958). A categorical scale occurs when the responses are classified; categories divide intervals of a continuous response function (DeVellis, 1991; Krosnick, 1991). A non-categorical scale asks respondents to express their opinion in numbers or in lines.

Saris and Gallhofer (2007) summarize four characteristics of a categorical scale. The first requirement is that answer categories should be complete. The second requirement is that they should be exclusive, that is, they should not

overlap. A third requirement is that answer categories match with the information in the item asked. Finally, all response categories should represent the same concept.

Therefore, categorical judgement scales prompt respondents using a certain number of answer categories, which generally are fully labelled to express preferences, perceptions, evaluations, feelings, ▶ attitudes, etc., about the concept measured in a specific measurement dimension (like-dislike, agree-disagree, not at all like me-very much like me, yes-no, etc.).

Categorical judgement scales are normally developed using three different methods (Dawis, 1987). In the Thurstone method (Thurstone & Chave, 1929), stimuli are selected in several stages from an exhaustive list of statements that represent the construct. Respondents are asked to choose on the items and to agree or to fix their position in the measurement dimension. For example, a researcher can determine that five dimensions measure social attitudes towards immigrants. Then a list of 25 statements can be presented, if five items are selected for each dimension. The respondent is then asked to agree or disagree with each statement, which are presented in a random order. The score of the scale is the average of the responses in the measurement dimension (in this example, agree-disagree) in a certain range of categories (e.g., 5-point scale: agree strongly, agree, neither agree nor disagree, disagree, and disagree strongly).

In the Q-sort method (Stephenson, 1953), derived from the Thurstone method, respondents are prompt to sort the stimuli along the scale. This method is used when multiple response roles are asked about the same set of stimuli. Following the example of the scale on attitudes towards immigration, multiple response roles are asked if respondents should answer about their personal opinion and what they think is the opinion of the majority of people in their neighborhood.

In rank-order methods, respondents are asked to compare pairs of items in the measurement dimension, for example, following the example above, respondents could be asked to compare two statements and say with which they agree more. They can be also asked to rank a large group of statements or items in the different categories of the measurement dimension.

Cox (1980, p. 419) distinguishes five factors that influence the quality of stimulus-centered scales according to the variance they aim to explain. The first factor is "the amount of information available for transmission by the scale"; if the stimuli are identical or very similar, the scaling looses meaning. The second factor is the "channel capacity of the scale"; this is dependent on the number of categories or response alternatives. If they are not complete, the quality of the instrument is affected. The third factor is the "number of scaling replications." As the source of variation in judgement scales comes from the stimuli, consistency of the scale is tested when a large number of respondents answer it. The fourth factor is "redundancy among replications" which means that the selected items forming the stimuli have high reliability. The fifth factor is "response error," and it can be related to the layout, instructions, or clarity of the way that the items are presented.

The ideal number of categories is a topic under debate in the literature of scaling. There is a consensus that more than two categories are needed, and there are several scholars that suggest seven categories as an adequate number (Cox, 1980, Krosnick & Fabrigar, 1997). However, this is only true if the items are heterogeneous enough and respondents have the same response function. Saris (1988, 1998) has shown that people have more information than the one that can be expressed in a 7-point scale and that longer scales are useful. The ideal number of categories is also related to the amount of information the researcher wants to get.

Cross-References

- ▶ Attitude Measurement
- ▶ Response Bias(es)
- ▶ Response Format

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CATI with Interactive Voice Response

► Computer-Assisted Interviews, Quality of Life

Causal and Effect Indicators

► Clinimetrics

Causal Attributions for Poverty

► Beliefs About Poverty

Causal Inference on Total, Direct, and Indirect Effects

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Synonyms

Theory of causal effects (TCEs)

Definition

The theory of causal effects (TCEs) is a mathematical theory providing a methodological foundation for design and analysis of experiments and quasi-experiments. TCE consists of two parts. In the first part, *total*, *direct*, and *indirect effects* are defined, the second part deals with causal inference, i.e., in the second part, it is shown how causal effects are identified by estimable quantities. In each part, there are two levels, a disaggregated and a reaggregated one.

In the *definition part* of TCE, the disaggregated level is called the *atomic level*. In this part, we translate J. St. Mill's *ceteris paribus clause* into probabilistic concepts. For this purpose, we introduce temporal order between events and/or random variables using the concept of a *filtration*. Defining an *atomic total-effect variable*, we isolate the effects of X on Y, controlling for all variables that are prior or simultaneous to X, while ignoring all intermediate variables in between X and Y. In contrast, in the definition of an *atomic t-direct-effect variable*, we ignore all intermediate variables in between t and Y, but control all variables (potential confounders) that are prior or simultaneous to t. At the second level of the definition part of TCE, we aggregate these atomic effects defining *average effects* as expectations and *conditional*

effects as conditional expectations of the corresponding atomic-effect variables.

In the *identification part* of TCE, we connect causal effects to estimable quantities, namely, conditional expectations of Y given X, or of Y given X, covariates, and/or intermediate variables, by the *unbiasedness assumption*. At the disaggregated level of the identification part, we present a number of *causality conditions*, i.e., conditions that imply unbiasedness and identifiability of causal effects. At this level, we condition on covariates such that one of these causality conditions holds. Once identification of conditional causal effects is achieved by controlling for these covariates, we can again reaggregate, taking expectations and/or conditional expectations of those conditional causal effects obtained at the disaggregated level. In this way, we can coarsen the conditional effects obtained at the disaggregated level of the identification part.

TCE has implications for design and data analysis of empirical studies aimed at estimating and testing causal effects. The most important design techniques are randomization, conditional randomization, and covariate selection. All these design techniques aim at satisfying one of the causality conditions. Techniques of data analysis can also be selected and/or developed guided by TCE (for more details see the Conclusion).

Research Traditions

Studying the effect of a variable X on a variable Y, we distinguish between total, direct, and indirect effects (Wright, 1921, 1923). In a randomized experiment, the *average total treatment effect* is typically estimated, which is the average causal effect of a treatment variable X on an outcome variable Y, irrespective of mediation processes. As soon as we want to gain insight into transmitting pathways, intermediate variables have to be included in order to estimate direct effects of X on Y. *Direct effects* represent those parts of total effects that are not transmitted through the intermediate variables. In contrast, *indirect effects* are those components of total effects of X on Y that are not direct but are transmitted through mediators. This entry aims at sharpening these intuitive ideas, presenting the stochastic theory of causal effects, which emerged from several research traditions.

The most important contribution of the *Neyman-Rubin tradition* (see, e.g., Rubin, 2005; Splawa-Neyman, 1923/1990) is its emphasis on defining causal effects such as individual, conditional, and average treatment effects. Defining such effects is important for proving that certain methods of data analysis yield unbiased estimates of these effects if certain assumptions can be made. Are there conditions under which the analysis of change scores (between pretest and posttests) and repeated-measures analysis of variance yield causal effects? Under which conditions do we test causal effects in the analysis of covariance? Which are the assumptions under which propensity score methods yield unbiased estimates of causal effects? Answers to all these questions presuppose that we have a clear-cut definition of causal effects.

The *Campbellian tradition* (see, e.g., Shadish, Cook, & Campbell, 2002), less formalized than the Neyman-Rubin tradition, addresses questions and problems beyond causality itself, which are also relevant in empirical causal research, such as: How to generalize beyond the study? What does the treatment variable mean? Which is the causal agent in a compound treatment variable comprising many aspects? What is the meaning of the outcome variable? Does it in fact measure the construct of interest? And, perhaps the most important question: Are there alternative explanations for the effects?

In the *graphical modeling tradition* (see, e. g., Pearl, 2009; Spirtes, Glymour, & Scheines, 2000), techniques have been developed for estimating causal effects, finding confounders, identifying causal effects, and searching for causal models if specific assumptions can be made. The fact that a randomized experiment does not guarantee the validity of causal inference on *direct* effects has been brought up by this research tradition.

Structural equation modeling and *psychometrics* showed how to use latent variables and structural equation modeling in testing causal hypotheses. Although many scientists hope to find causal answers via structural equation modeling, it should be clearly stated that structural equation modeling – and this is also true for graphical modeling and other kinds of statistical modeling (including analysis of variance) – does neither necessarily mean to estimate and test causal effects, nor does it provide a satisfactory *theory* of causal effects. Nevertheless, this research tradition contributes – just like graphical modeling and other areas of statistics – many techniques and tools that are useful in the analysis of causal effects.

Mediation Analysis has roots in genetics, psychology, sociology, and epidemiology. Mediation is concerned with analyzing total, direct, and indirect effects. To date, much substantive research applying mediation analysis is based on influential papers by Baron and Kenny (1986), Bollen (1987), MacKinnon (2008), Preacher, Rucker, and Hayes (2007), Sobel (1982), which are based on the original work of Sewall Wright cited above. Recently, ideas from the causal inference literature have entered the discourse on mediation analysis. Questions like "Is the effect of X on Y *causally* transmitted through a mediator?" or "What is the *causal* direct effect of X on Y" have been raised in this field. Early concerns about the causal interpretability of mediation effects have already been expressed by Judd and Kenny (1981) as well as Holland (1988).

All these research traditions (as well as others not mentioned) contributed to our knowledge about causal inference. In this entry, we present a unified stochastic theory of causal effects, focusing on experimental and quasi-experimental designs, in which the putative cause is a *discrete* random variable (see also Mayer, Thoemmes, Rose, Steyer, & West, submitted). It is presumed that the reader is familiar with some fundamental concepts of measure and probability theory, as provided in textbooks such as Bauer (1996), Bauer (2001), Klenke (2008), or Steyer, Nagel, Partchev, and Mayer (in press).

Preliminary Considerations

Basic Idea of Causal Effects

For the time being, consider a random variable X with two values, 0 and 1, assuming $P(X=0)$, $P(X=1)>0$. These values of X may represent two treatment (intervention, exposition) conditions, e.g., a treatment and a control. Therefore, X will be called a *treatment variable*. The random variable Y (assessing, e.g., *quality of life*) will be called the *response* or *outcome variable* and is assumed to have a finite expectation. This assumption implies that the regression $E(Y|X)$ is defined, that the conditional expectations $E(Y|X=1)$ and $E(Y|X=0)$ exist and are finite, and that the difference $E(Y|X=1)-E(Y|X=0)$ between the two conditional expectations of Y in the two treatment conditions is defined.

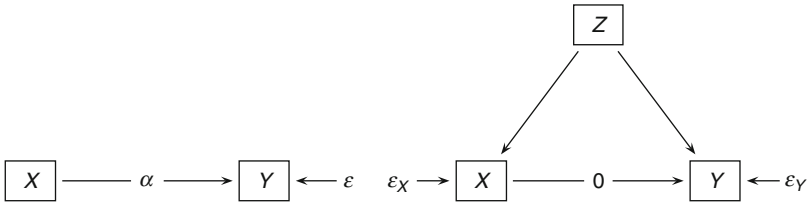
Note that $E(Y|X)$ can be written as a linear function $\alpha_0+\alpha_1 X$ with slope $\alpha_1 = E(Y|X=1)-E(Y|X=0)$. However, the difference $E(Y|X=1)-E(Y|X=0)$ is not necessarily identical to the (total) causal treatment effect comparing treatment $(x=1)$ to control $(x=0)$. The crucial problem is that X and Y may both depend on a covariate Z. In this case, a regressive dependence of Y on X would be observed – i.e., $\alpha_1 \neq 0$ – (see left-hand side of Fig. 1), even though Y is regressively independent of X given Z (see right-hand side of Fig. 1). In such a case, the slope of the regression, i.e., $\alpha_1 = E(Y|X=1)-E(Y|X=0)$, does not describe the total causal effect of X on Y.

What would be the remedy? Clearly, if Z were the only variable biasing the dependence of Y on X, then keeping constant Z at one of its values z would eliminate this spurious dependence of Y on X. In this case, the differences

$$E(Y|X=1,Z=z)-E(Y|X=0,Z=z)$$

would describe the $(Z{=}z)$-conditional total treatment effects of X on Y. Furthermore, taking the expectation of these $(Z=z)$-conditional effects over the distribution of Z would yield the average total treatment effect.

Unfortunately, in experiments and quasi-experiments in psychology and other social



Causal Inference on Total, Direct, and Indirect Effects, Fig. 1 Path diagrams representing the regression $E(Y|X)$ (*on the left*) as well as $E(X|Z)$ and $E(Y|X,Z)$ (*on the right*)

sciences, there are many variables that may create bias. However, conceptually, and for the purpose of *defining* atomic and various aggregated (average, conditional) causal effects, all these variables can be controlled, as will be shown in Causal Effects. Of course, in empirical applications, controlling all these variables that may create bias is a challenge.

Conceptual Framework

Probability Space and Random Variables

In the sequel, the following kinds of random experiments. (a) to (e) is considered a single random experiment:

(a) Sample a person u out of a set of persons (the population of persons).
(b) Observe the value z of a fallible (possibly multivariate) pretreatment variable Z.
(c) Assign the unit or observe its assignment to one of several experimental conditions (represented by the values x of the treatment variable X).
(d) Observe the value m of a (possibly multivariate) intermediate variable M.
(e) Observe the value y of the outcome variable Y.

This kind of random experiments is called a *single-unit trial*. It is the kind of empirical phenomenon typically considered in that part of TCE that is devoted to causal effects in experiments and quasi-experiments. It does not represent a sampling process, which consists of repeating such a single-unit trial many times in some way or other and which would be considered in treating estimation and hypothesis testing, issues that are not treated in this entry.

Like all other random experiments, a single-unit trial as described above is represented by a *probability space* $(\Omega, \mathscr{A}, P)$, which is the formal framework that is necessary to define, e.g., random variables, distributions, conditional expectations (see, e.g., Bauer, 2001, Klenke, 2008, or Steyer et al., in press), and causal effects.

Example 1: Joe and Ann with Self-Selection

The first column of Table 1 shows all eight possible outcomes $\omega \in \Omega$ of a very simple random experiment: Sample a person from the set $\Omega_U := \{Joe, Ann\}$, observe whether (*yes*) or not (*no*) the sampled person selects treatment, and whether (+) or not (−) the sampled person reaches a success criterion. This example suffices to illustrate many concepts used in this entry. The eight triples displayed in the first column are the elements of the set Ω. The set of all subsets of Ω, the *power set* $\mathscr{P}(\Omega)$, is chosen as the σ-algebra $\mathscr{A}$ (for the concept of a σ-algebra see, e.g., Chap. 1 of Steyer et al., in press). It has $2^8 = 256$ elements, representing all events that can be considered in this random experiment. The second column displays the probabilities of all elementary events $\{\omega\}$, $\omega \in \Omega$. These eight probabilities can be used to compute the probabilities of all 256 events using the additivity of the *probability measure* $P : \mathscr{A} \to [0,1]$ (see Steyer et al., in press, Def. 4.1). For example, the probability of the event that Joe is sampled and treated is

$$\begin{aligned} &P[\{(Joe, yes, -), (Joe, yes, +)\}] \\ &\quad = P[\{(Joe, yes, -)\}] + P[\{(Joe, yes, +)\}] \\ &\quad = .004 + .016 = .02. \end{aligned}$$

In fact, all other parameters displayed in Table 1 can be computed from the probabilities of the eight elementary events. Alternatively, all probabilities displayed in this table, including those for the elementary events, can be computed

Causal Inference on Total, Direct, and Indirect Effects, Table 1 Joe and Ann with self-selection

Outcomes ω		Observables			Regressions						
Unit Treatment Success	$P(\{\omega\})$	Person variable U	Treatment variable X	Outcome variable Y	$E(Y\|X,U)$	$E(Y\|X)$	$E(X\|U)$	$E^{X=0}(Y\|U)$	$E^{X=1}(Y\|U)$	$P^{X=0}(\{\omega\})$	$P^{X=1}(\{\omega\})$
(*Joe*, *no*, −)	.144	*Joe*	0	0	.7	.60	.04	.7	.8	.24	.00
(*Joe*, *no*, +)	.336	*Joe*	0	1	.7	.60	.04	.7	.8	.56	.00
(*Joe*, *yes*, −)	.004	*Joe*	1	0	.8	.42	.04	.7	.8	.00	.01
(*Joe*, *yes*, +)	.016	*Joe*	1	1	.8	.42	.04	.7	.8	.00	.04
(*Ann*, *no*, −)	.096	*Ann*	0	0	.2	.60	.76	.2	.4	.16	.00
(*Ann*, *no*, +)	.024	*Ann*	0	1	.2	.60	.76	.2	.4	.04	.00
(*Ann*, *yes*, −)	.228	*Ann*	1	0	.4	.42	.76	.2	.4	.00	.57
(*Ann*, *yes*, +)	.152	*Ann*	1	1	.4	.42	.76	.2	.4	.00	.38

from the eight parameters of the first experiment displayed in Table 2.

Table 1 also displays several random variables, e.g., the observable random variables (the observables) U, X, and Y. The first, U, will be called the *person variable*. Its values are the person sampled in the random experiment considered. The second, X, called the *treatment variable*, indicates whether or not the person sampled is treated. The third, Y, is called the *outcome variable*. In this example, it indicates whether or not the patient sampled gives a positive statement about his or her *quality of live, 6 months after treatment*.

Other random variables are the *regressions* (synonymously, *conditional expectations*) $E(Y|X,U)$, $E(Y|X)$, and $E(X|U)$. Because Y is a dichotomous regressand with values 0 and 1, these regressions are also denoted by $P(Y=1|X,U)$, $P(Y=1|X)$, and $P(X=1|U)$, respectively.

All the random variables mentioned above are mappings on Ω with values in a subset of the set $\mathbb{R}$ of real numbers, except for U, which takes on its values in the set $\{Joe, Ann\}$. By definition, all random variables on $(\Omega, \mathscr{A}, P)$ are measurable with respect to $\mathscr{A}$ and have a distribution denoted by P_U, P_X, P_Y, etc. (see Chap. 5 of Steyer et al., in press).

Let us use X to illustrate the concept of *measurability with respect to* $\mathscr{A}$. First note that $X : \Omega \to \Omega'_X$ is a mapping with *domain* Ω and *range* $\Omega'_X = \{0, 1\}$. Furthermore, the definition of a random variable does not only presuppose that there is a σ-algebra on Ω, but also a σ-algebra on Ω'_X. In our example, this σ-algebra on Ω'_X is $\mathscr{A}'_X = \{\Omega'_X, \emptyset, \{0\}, \{1\}\}$. The definition of a random variable on $(\Omega, \mathscr{A}, P)$ requires that

$$X^{-1}(A') \in \mathscr{A}, \quad \forall A' \in \mathscr{A}'_X, \tag{1}$$

where $X^{-1}(A') := \{\omega \in \Omega : X(\omega) \in A'\}$ is the inverse image of A' under X. In our example, (1) is trivially true, because $\mathscr{A}$ is the power set $\mathscr{P}(\Omega)$. In examples in which $\mathscr{A} \neq \mathscr{P}(\Omega)$ – and this is the case as soon as continuous random variables are involved – this requirement is not trivial. If it holds, then it follows that all events $X^{-1}(A')$, $A' \in \mathscr{A}'_X$ have a probability, namely, $P[X^{-1}(A')]$, because P is a mapping on $\mathscr{A}$, assigning a probability to *all* its elements. This fact is used to define the *distribution of* X by $P_X : \mathscr{A}'_X \to [0, 1]$ with

$$P_X(A') = P[X^{-1}(A')], \quad \forall A' \in \mathscr{A}'_X. \tag{2}$$

Causal Inference on Total, Direct, and Indirect Effects, Table 2 Four random experiments with Joe and Ann

Random experiment	u	$P(U=u)$	$E^{X=0}(Y\|U=u)$	$E^{X=1}(Y\|U=u)$	$P(X=1\|U=u)$
1. With self-selection	*Joe*	.5	.7	.8	.04
	Ann	.5	.2	.4	.76
2. No treatment for Joe	*Joe*	.5	.7	99	0
	Ann	.5	.2	.4	.76
3. With random assignment	*Joe*	.5	.7	.8	.4
	Ann	.5	.2	.4	.4
4. Homogeneous	*Joe*	.5	.7	.8	.8
	Ann	.5	.7	.8	.4

In our example, the distribution of X is specified by

$$\begin{aligned} P_X(\{0\}) &= P[X^{-1}(\{0\})] \\ &= P[\{(Joe,\ no,-),\ (Joe,\ no,+), \\ &\qquad (Ann,\ no,-),\ (Ann,\ no,+)\}] \\ &= .144 + .336 + .096 + .024 = .6. \end{aligned}$$

Analogously, $P_X(\{1\}) = .4,\ P_X(\Omega'_X) = 1$, and $P_X(\emptyset) = 0$.

Finally, the set

$$X^{-1}(\mathscr{A}'_X) := \left\{X^{-1}(A') : A' \in \mathscr{A}'_X\right\} \quad (3)$$

is called the σ-*algebra generated by* X and is also denoted by $\sigma(X)$. In our example,

$$\begin{aligned} \sigma(X) &= \{\Omega, \emptyset, X^{-1}(\{0\}), X^{-1}(\{1\})\} \\ &= \{\Omega, \emptyset, \{(Joe,\ no,-),\ (Joe,\ no,+), \\ &\qquad (Ann,\ no,-),\ (Ann,\ no,+)\}, \\ &\qquad \{(Joe,\ yes,-), (Joe,\ yes,+), \\ &\qquad (Ann,\ yes,-),\ (Ann,\ yes,+)\}\}. \end{aligned}$$

Filtration and Temporal Order

In contrast to many other random experiments, in a single-unit trial as described in section "Basic Idea of Causal Effects," there is additional structure: There are *events* that are *prior* to the treatment variable X such as the event *Joe is sampled* or the event that the person sampled is *male*. *Random variables* may also be prior to X, such as the fallible pretest Z = *quality of life before treatment*, or the person variable U (taking on the values *Joe*, *Ann*, *Jim*, etc.) itself, which is prior to Z, because the person, its sex, its race, etc. are determined *before* a fallible value z of Z is assessed. Furthermore, the outcome Y represents events, such as $\{Y = y\} := \{\omega \in \Omega : Y(\omega) = y\}$, that may occur *after* treatment. Hence, Y is *posterior* to X.

In more formal and general terms, this temporal order can be represented by a *filtration* $(\mathscr{F}_t)_{t\in T}$ *in* $\mathscr{A}$, which is a fundamental concept in the theory of stochastic processes (see Table 3 and, e.g., Bauer, 1996; Klenke, 2008; Øksendal, 2007). In many applications, it is sufficient to consider a filtration with an index set $T = \{1, \ldots, n_T\}$, where n_T is a natural number > 1. In other applications, T might be a subset of the set of real numbers.

Example 1 Continued

In Example 1, we define $\mathscr{F}_1 := \sigma(U)$, $\mathscr{F}_2 := \sigma(U, X)$, $\mathscr{F}_3 := \sigma(U, X, Y)$. Hence, in this example, the filtration $(\mathscr{F}_t)_{t\in T}$ consists of $n_T = 3$ σ-algebras: $\mathscr{F}_1$ has only four elements, the event that Joe is sampled, the event that Ann is sampled, Ω (Joe or Ann is sampled), and Ø (neither Joe nor Ann is sampled). The σ-algebra $\mathscr{F}_2$ has $2^4 = 16$ elements: All elements in $\mathscr{F}_1$, the event that the person sampled is treated, the event that the person sampled is not treated, as well as events such as Joe (Ann) is sampled and (not) treated. Finally, $\mathscr{F}_3$ has $2^8 = 256$ elements. It is identical to the power set of Ω and contains as

Causal Inference on Total, Direct, and Indirect Effects, Table 3 Framework and preliminary concepts

Let X, Y, and W be random variables on a probability space $(\Omega, \mathscr{A}, P)$.	
Filtration in $\mathscr{A}$	A family $(\mathscr{F}_t)_{t\in T}$ of σ-algebras $\mathscr{F}_t \subset \mathscr{A}$ such that $\mathscr{F}_s \subset \mathscr{F}_t$ if $s \leq t$
X is prior to Y	X is called *prior to* Y (and Y *posterior to* X) *in* $(\mathscr{F}_t)_{t\in T}$, if there is an $s \in T$ such that $\sigma(X) \subset \mathscr{F}_s, \sigma(Y) \not\subset \mathscr{F}_s$, and there is a $t \in T, s \in t$, such that $\sigma(Y) \subset \mathscr{F}_t$
X is simultaneous to Y	X is called *simultaneous to* Y *in* $(\mathscr{F}_t)_{t\in T}$ if there is a $t \in T$ such that $\sigma(X) \subset \mathscr{F}_t, \sigma(Y) \subset \mathscr{F}_t$, and no $s \in T, s \in t$, such that $\sigma(X) \subset \mathscr{F}_s, \sigma(Y) \subset \mathscr{F}_s$
Global t-covariate of X t_X t_Y	A random variable denoted $C_{X,t}$ satisfying: $\sigma(X, C_{X,t}) = \mathscr{F}_t, \sigma(X) \cap \sigma(C_{X,t}) = \{\Omega, \emptyset\}$ and $t_X \leq t < t_Y$, where $t_X \in T$ is defined by $\sigma(X) \subset \mathscr{F}_{t_X}$ and $\sigma(X) \not\subset \mathscr{F}_t$ if $t < t_X$. (t_Y is defined in the same way replacing X by Y)
t-covariate of X	A random variable Z_t on $(\Omega, \mathscr{A}, P)$ with $\sigma(Z_t) \subset \sigma(C_{X,t})$
Global covariate of X	A random variable C_X on $(\Omega, \mathscr{A}, P)$ such that $C_X := C_{X,t_X}$
Covariate of X	A random variable Z on $(\Omega, \mathscr{A}, P)$ such that $\sigma(Z) \subset \sigma(C_X)$
(t_1, t_2)*-intermediate variable*	A random variable M on $(\Omega, \mathscr{A}, P)$ such that $\sigma(M) \not\subset \mathscr{F}_{t_1}$ and there exists a $t \in T$, $t < t_2$, such that $\sigma(M) \subset \mathscr{F}_t$
Causality space with discrete cause	A quadruple $((\Omega, \mathscr{A}, P), (\mathscr{F}_t)_{t\in T}, X, Y)$ satisfying:
	(a) $(\mathscr{F}_t)_{t\in T}$ is a filtration in $\mathscr{A}$
	(b) X is discrete with values in $\Omega'_X = \{0, 1, \ldots, n\}$, and $P(X = x) > 0$, $\forall x \in \Omega'_X$,
	(c) Y is numerical with finite expectation $E(Y)$
	(d) X is prior to Y in $(\mathscr{F}_t)_{t\in T}$

elements all events that can be considered in this random experiment.

Preliminary Definitions

Order With Respect to a Filtration

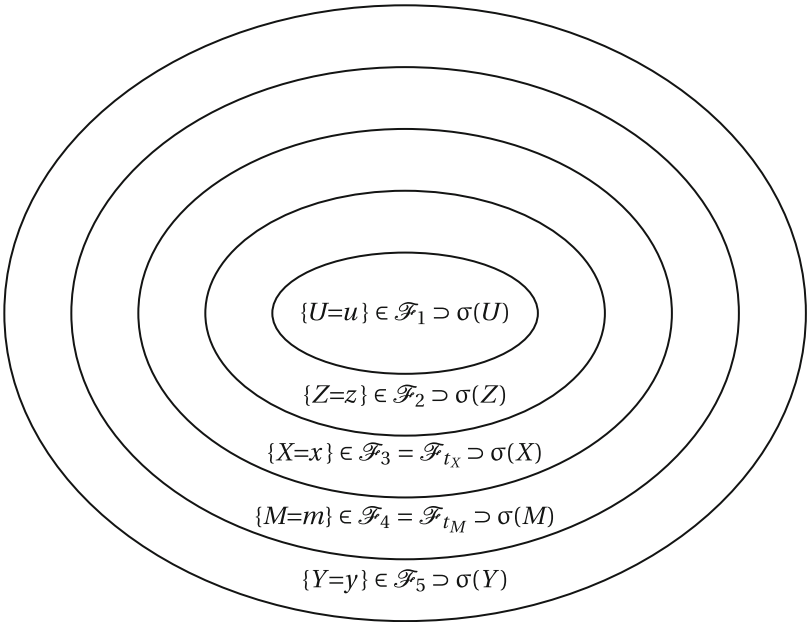
Figure 2 depicts a filtration with $n_T = 5$ and it also shows in which σ-algebra $\mathscr{F}_t$ the events $\{U = u\}$, $\{Z = z\}$, $\{X = x\}$, etc. *occur for the first time*. For example, $\{Z = z\} \notin \mathscr{F}_1$ but $\{Z = z\} \in \mathscr{F}_2, \{X = x\} \notin \mathscr{F}_2$ but $\{X = x\} \in \mathscr{F}_3$, etc. Using such a filtration, one can easily define terms such as "U is prior to X," "X is prior to Y," and "X_1 is simultaneous to X_2," e.g., if X_2 is a second treatment variable and the second treatment is applied at the same time as the first one. The idea is to see in which σ-algebra $\mathscr{F}_t$ events such as $\{X = x\}, \{Z = z\}$, or $\{Y = y\}$ occur *for the first time*. Using this criterion for the kind of single-unit trial described above, X is prior to M, which itself is prior to Y, whereas X is posterior to U and Z. Using the concept of a σ*-algebra generated by a random variable* V [denoted $\sigma(V)$] (see, e.g., Klenke, 2008), this idea is defined in more formal terms in Table 3. The σ-algebras generated by X, Y, etc. are *subsets* of the corresponding σ-algebras $\mathscr{F}_t$. In contrast, the events $\{X = x\}, \{Y = y\}$, etc. are *elements* of the corresponding $\mathscr{F}_t$ (see again Fig. 2).

Global Covariates

The concept of a *global t-covariate of* X defined in Table 3 is crucial. It is denoted by $C_{X,t}$ and will be used to define true-outcome variables and atomic causal effects, i.e., effects on the most fine-grained level (see Causal Effects).

Note that there several time points $t \in T$ with respect to which a global covariate of X can be considered. For example, defining atomic *total* effects, we control for C_{X,t_X}, which is defined such that it comprises all variables other than X that are prior or simultaneous to X. In contrast, defining atomic *direct* effects with respect to time t, we control for $C_{X,t}$, which is defined such that it comprises all variables other than X that are prior, simultaneous, or posterior to t, but not posterior to t (see Table 3).

More precisely $C_{X,t}$ is a random variable on $(\Omega, \mathscr{A}, P)$ and its most important property is $\sigma(C_{X,t}, X) = \mathscr{F}_t$, i.e., $C_{X,t}$ and X together generate $\mathscr{F}_t$. The second assumption ensures that X is not comprised in $C_{X,t}$, i.e., $\sigma(X) \not\subset \sigma(C_{X,t})$, and the third assumption implies that $C_{X,t}$ is



Causal Inference on Total, Direct, and Indirect Effects, Fig. 2 Venn diagram of a filtration with $T = \{1, \ldots, 5\}$

simultaneous or posterior to X and prior to Y. Intuitively speaking, $C_{X,t}$ comprises all random variables on $(\Omega, \mathscr{A}, P)$ that are prior or simultaneous to t, except for X itself, i.e., it comprises all potential confounders that could possibly bias t-direct effects (pertaining to pairs of values) of X on Y.

Covariates and Intermediate Variables

In this framework, a *t-covariate of X* is defined as any random variable on $(\Omega, \mathscr{A}, P)$, say Z_t, with $\sigma(Z_t) \subset \sigma(C_{X,t})$. This implies: All events $A \in \mathscr{A}$ that are represented by a t-covariate of X, such as $\{Z_t = z_t\}$, are elements of $\mathscr{F}_t$. Similarly, using the filtration, (t_1, t_2)-*intermediate variables* can also be defined (see Table 3). Note again that T may also be a *continuous* (time) set.

Simplified Notation

For simplicity, the terms *covariate of X* and t_X-*covariate* will be used as synonyms. Similarly,

$$C_X := C_{X,t_X} \text{ and } Z := Z_{t_X}$$

denote a global t_X-covariate of X (or simply, a *global covariate of X*) and a t_X-covariate of X (or simply, a *covariate of X*), respectively. In single-unit trials in which no fallible covariates of X are assessed, U can be a global covariate of X. Considering a random experiment in which a fallible covariate of X is assessed, then (U, Z) can be a global covariate of X, where Z denotes the (possibly multivariate) random variable consisting of all fallible covariates of X.

Causality Space

Throughout the rest of this entry, we assume that there is a causality space with discrete cause (see Table 3). Such a causality space provides the formal framework in which causal effects can be defined.

Example 1 Continued

In section "Example 1 Continued," the filtration $(\mathscr{F}_t)_{t \in T}$ has been specified for Example 1. Using the definitions displayed in Table 3, yields: U is *prior to X* and to Y, X is *prior to Y*. Furthermore, 1_{Joe} is *simultaneous to U*, where 1_{Joe} denotes the indicator variable of the event that Joe is sampled. It takes on the value 1, if Joe is sampled, and 0, otherwise.

In this example, U and 1_{Joe} are *global covariates of X*, and U, 1_{Joe}, and 1_{male} are covariates of X, where 1_{male} is the indicator

variable of the event that the sampled person is male. (In this specific example with only one male and one female person, $1_{Joe} = 1_{male}$.) If we would also like to consider intermediate variables, Table 1 would have to be extended to include at least one intermediate variable such as *quality of live 3 months after treatment*. The filtration $(\mathscr{F}_t)_{t\in T}$ would have to be extended correspondingly. Hence, now all components of a causality space $\big((\Omega, \mathscr{A}, P), (\mathscr{F}_t)_{t\in T}, X, Y\big)$ defined in Table 3 have been illustrated.

Causal Effects

In this section, the definitions of adjusted conditional expectations and causal effects displayed in Table 4 are explained and illustrated.

$(X = x)$-Conditional Probability Measure

A fundamental concept used in the definitions in Table 4 is the $(X = x)$-conditional probability measure $P^{X=x}$. Assume $P(X=x) > 0$, for $x \in \Omega'_X$. Then the $(X = x)$-*conditional probability measure on* $(\Omega, \mathscr{A})$ is defined by

$$\forall\, A \in \mathscr{A}: \quad P^{X=x}(A) := P(A|X=x). \tag{4}$$

where $x \in \Omega'_X = \{0, 1, \ldots, n\}$. Hence, for each value x of X, there is such a probability measure. The last two columns of Table 1 display the values of $P^{X=0}$ and $P^{X=1}$ for all elementary events $\{\omega\}$ in Example 1.

Because distributions, expectations, conditional expectations, etc. all refer to a probability measure, each of these measures defines distributions, expectations, conditional expectations, etc. with respect to these measures. Hence, $P_Y^{X=x}$ will denote the distribution, $E^{X=x}(Y)$ the expectation, and $E^{X=x}(Y|Z)$ the Z-conditional expectation of Y with respect to the measure $P^{X=x}$ (Chap. 13 of Steyer et al. (in press) provides an extensive presentation of $E^{X=x}(Y|Z)$.)

True-Outcome Variable With Respect to t

As already mentioned, a global t-covariate of X comprises all variables that are prior or simultaneous to t, except for X. Hence, conditioning on $C_{X,t}$ all potential confounders of t-direct effects are controlled. Now consider the $C_{X,t}$-conditional expectation of Y with respect to $P^{X=x}$. For $t \in T$, we define *a version of the true-outcome variable* $\tau_{x,t}$ *with respect to* t by

$$\tau_{x,t} := E^{X=x}\big(Y|\, C_{X,t}\big), \quad x \in \Omega'_X. \tag{5}$$

Hence, intuitively speaking, considering such a true-outcome variable $\tau_{x,t}$ conditioning is on a value of x of X and all other variables that are prior or simultaneous to t. What still varies and may affect Y are measurement errors of Y, but also effects of variables that are in between t and t_Y. If $t = t_X$ and U takes the role of $C_{X,t}$, then $\tau_{x,t}$ is a stochastic version of Rubins' potential outcome (see, e. g., Rubin, 2005).

$P^{X=x}$-Uniqueness and P-Uniqueness

In general, conditional expectations are not uniquely defined. Hence, there is a set $\mathscr{E}^{X=x}\big(Y|C_{X,t}\big)$ of such conditional expectations. However, if $\tau_{x,t}$, $\tau^*_{x,t} \in \mathscr{E}^{X=x}\big(Y|C_{X,t}\big)$ are two such versions, then they are $P^{X=x}$-*equivalent*, i.e.,

$$\tau_{x,t} \underset{P^{X=x}}{=} \tau^*_{x,t}, \tag{6}$$

which is a shortcut for

$$P^{X=x}\Big(\Big\{\omega \in \Omega : \tau_{x,t}(\omega) = \tau^*_{x,t}(\omega)\Big\}\Big) = 1.$$

Hence, Eq. 6 means that $\tau_{x,t}$ and $\tau^*_{x,t}$ take on identical values with $(X{=}x)$-conditional probability 1. In this case, $E^{X=x}\big(Y|C_{X,t}\big)$ is said to be $P^{X=x}$-*unique*. Hence, $P^{X=x}$-uniqueness of $E^{X=x}\big(Y|C_{X,t}\big)$ means that all versions $\tau_{x,t} \in \mathscr{E}^{X=x}\big(Y|C_{X,t}\big)$ are pairwise $P^{X=x}$-equivalent.

Note that $P^{X=x}$-uniqueness does not imply P-*uniqueness* of $E^{X=x}\big(Y|C_{X,t}\big)$ i.e., it does not imply P-equivalence of $\tau_{x,t}, \tau^*_{x,t} \in \mathscr{E}^{X=x}\big(Y|C_{X,t}\big)$ which is defined by

$$\tau_{x,t} \underset{P}{=} \tau^*_{x,t}. \tag{7}$$

Causal Inference on Total, Direct, and Indirect Effects, Table 4 Adjusted conditional expectations and t-direct-effect functions

Let $\left((\Omega, \mathscr{A}, P), (\mathscr{F}_t)_{t\in T}, X, Y\right)$ be a causality space with discrete cause, let $C_{X,t}$ be a global t-covariate of X, let W be a random variable on $(\Omega, \mathscr{A}, P)$, and let $x, x' \in \Omega'_X = \{0, 1, \ldots, n\}$ denote two values of X	
$\mathscr{E}^{X=x}\left(Y\middle\|C_{X,t}\right)$	*The set of all versions of the $C_{X,t}$-conditional expectation of Y with respect to $P^{X=x}$*
$E^{X=x}\left(Y\middle\|C_{X,t}\right)$ $\tau_{x,t}$	*A version of the $C_{X,t}$-conditional expectation of Y with respect to $P^{X=x}$*. A shortcut for $E^{X=x}\left(Y\middle\|C_{X,t}\right)$ is $\tau_{x,t}$
$\delta_{xx',t}$	*A version of the atomic t-direct-effect variable* of x *versus* x'. Assume:
	(a) There is a $\tau_{x,t} \in \mathscr{E}^{X=x}\left(Y\middle\|C_{X,t}\right)$ with finite expectation $E\left(\tau_{x,t}\right)$ and a $\tau_{x',t} \in \mathscr{E}^{X=x'}\left(Y\middle\|C_{X,t}\right)$ with finite expectation $E\left(\tau_{x',t}\right)$
	(b) $\tau_{x,t}$ and $\tau_{x',t}$ are P-unique
	Assumption (a) implies that there is a finite $\tau_{x,t} \in \mathscr{E}^{X=x}\left(Y\middle\|C_{X,t}\right)$ and a finite $\tau_{x',t} \in \mathscr{E}^{X=x'}\left(Y\middle\|C_{X,t}\right)$. Choosing two such finite $\tau_{x,t}$ and $\tau_{x',t}$, we define $\delta_{xx',t} := \tau_{x,t} - \tau_{x',t}$. Assumption (b) implies that $\delta_{xx',t}$ is P-unique
$\bar{E}^{C_{X,t}}(Y\|X=x)$	*The $C_{X,t}$-adjusted $(X=x)$-conditional expectation of Y*. If (a) and (b) hold, we define $\bar{E}^{C_{X,t}}(Y\|X=x) := E\left(\tau_{x,t}\right)$ and say that it *exists*
$ADE_{xx',t}$	The *average t-direct effect of x versus x'*. Assuming that $\bar{E}^{C_{X,t}}(Y\|X=x)$ and $\bar{E}^{C_{X,t}}(Y\|X=x')$ exist, we define $ADE_{xx',t} := \bar{E}^{C_{X,t}}(Y\|X=x) - \bar{E}^{C_{X,t}}(Y\|X=x')$
$\bar{E}^{C_{X,t}}(Y\|X=x;W)$	*A version of the $C_{X,t}$-adjusted $(X=x,W)$-conditional expectation of Y*. If (a) and (b) hold, we define $\bar{E}^{C_{X,t}}(Y\|X=x;W) := E\left(\tau_{x,t}\middle\|W\right)$ and say that it *exists*
$CDE_{xx',t}(W)$	A version of the *W-conditional t-direct effect-function of x versus x'*. If (a) and (b) hold, then $\bar{E}^{C_{X,t}}(Y\|X=x;W)$ and $\bar{E}^{C_{X,t}}(Y\|X=x';W)$ are P-unique. Furthermore, under (a) and (b), there is a finite version $\bar{E}^{C_{X,t}}(Y\|X=x;W)$ and a finite version $\bar{E}^{C_{X,t}}(Y\|X=x';W)$. Choosing two such finite versions, we define $CDE_{xx',t}(W) := \bar{E}^{C_{X,t}}(Y\|X=x;W) - \bar{E}^{C_{X,t}}(Y\|X=x';W)$

Note: Proofs of the propositions in this table are found in Chaps. 13–16 of Steyer et al. (in press)

Again, Eq. 7 is a shortcut for

$$P\left(\left\{\omega \in \Omega : \tau_{x,\,t}(\omega) = \tau^*_{x,\,t}(\omega)\right\}\right) = 1.$$

The assumption that $\tau_{x,t}$ is P-unique plays a crucial role not only in the definition but also in the identification of causal effects. It implies that all versions $\tau_{x,\,t} \in \mathscr{E}^{X=x}\left(Y\middle|C_{X,\,t}\right)$ have identical distributions, and therefore also identical expectations, variances, and covariances with other random variables.

P-uniqueness of $\tau_{x,t}$ is equivalent to

$$P\left(X=x\middle|C_{X,\,t}\right) \underset{P}{>} 0, \tag{8}$$

which is defined by

$$P\left(\left\{\omega \in \Omega :\ P\left(X=x\middle|C_{X,\,t}\right)(\omega) > 0\right\}\right) = 1.$$

In our examples with Joe and Ann, in which U takes the role of $C_{X,\,t_X}$, requiring $P(X=x|U) \underset{P}{>} 0$ means that all persons must have a nonzero treatment probability, unless the person has a zero probability to be sampled. (See Chap. 13 of Steyer et al. (in press) for other conditions that are equivalent to P-uniqueness.).

Example 1 Continued

In Example 1, U is a global t_X-covariate of X. Using the simplified notation $C_{X,\,t} = C_X$ for the case $t = t_X$, we can also say that U is a global covariate of X. Table 1 displays the U-conditional expectations $E^{X=0}(Y|U)$ and $E^{X=1}(Y|U)$, which are identical with the total-effect true-outcome variables τ_0 and τ_1. In this example, these true-outcome variables are uniquely defined and therefore, they are also P-unique. They are random variables on $(\Omega, \mathscr{A}, P)$ just like U, X, Y, and the other regressions such as $E(Y|X)$, $E(Y|X,U)$, and $E(X|U)$. Note that, by definition, $\tau_0 = E^{X=0}(Y|U)$ and $\tau_1 = E^{X=1}(Y|U)$ are *measurable with respect to* U, i.e., $\sigma(\tau_0) \subset \sigma(U)$ and $\sigma(\tau_1) \subset \sigma(U)$. This implies that there are functions $g_0, g_1 : \{Joe,\ Ann\} \to \mathbb{R}$

such that $\tau_0 = g_0(U)$ and $\tau_1 = g_1(U)$ (see Sect. 13.1.3 of Steyer et al., in press). From a substantive point of view, this means that the values of τ_0 and τ_1 represent properties of the person u sampled in the random experiment considered, the conditional expectations $E^{X=0}(Y|U=u)$ and $E^{X=1}(Y|U=u)$.

Example 2: No Treatment for Joe

The second part of Table 2 displays a random experiment in which the causality space is identical to the one described in Example 1 except for the probability measure P. In this second example, $\tau_1 = E^{X=1}(Y|U)$ is *not P-unique*. The reason is that $P(X=1|U=Joe)=0$, whereas $P(U=Joe)>0$. In this case, the value of $E^{X=1}(Y|U)$ is not uniquely defined for all $\omega \in \{U=Joe\}$. Hence, $E^{X=1}(Y|U=Joe)$ is an arbitrary real number. [In Table 2, the number 99 has arbitrarily been chosen. Although this number is not a conditional probability, it is fully in line with the general definition of a conditional expected value as the value of a factorization of a regression (see Steyer et al., in press, Chap. 9).] The fact that $E^{X=1}(Y|U=Joe)$ is arbitrary is not a problem by itself, because $P(X=1|U=Joe)=0$. However, together with $P(U=Joe)>0$, it is a problem: It implies that $E^{X=1}(Y|U)$ is not P-unique, and which in turn implies, e.g., that different versions $\tau_1, \tau_1^* \in \mathscr{E}^{X=1}(Y|U)$ have different expectations, i.e., $E(\tau_1) \neq E(\tau_1^*)$.

In the same example, $\tau_0 = E^{X=0}(Y|U)$ *is P-unique*; it is even uniquely defined. This implies, e.g., that $E(\tau_0)$ is a uniquely defined number. Expectations such as $E(\tau_0)$ and $E(\tau_1)$ play a crucial role in the definition of average direct and total effects. However, P-uniqueness of the true-outcome variables is also required in the definition of atomic total and direct effect variables.

Atomic *t*-Direct-Effect Variable

Assumption (a) in Table 4 implies that there is a finite version $\tau_{x,t} \in \mathscr{E}^{X=x}(Y|C_{X,t})$ and a finite version $\tau_{x',t} \in \mathscr{E}^{X=x'}(Y|C_{X,t})$. Assuming P-uniqueness of $\tau_{x,t}$ and $\tau_{x',t}$ [see assumption (b) in that table] is a second prerequisite for the difference $\tau_{x,t} - \tau_{x',t}$ to be meaningful. This assumption is equivalent to

$$P(X=x|C_{X,t}) \underset{P}{>} 0 \text{ and } P(X=x'|C_{X,t}) \underset{P}{>} 0. \quad (9)$$

It implies that $\tau_{x,t} - \tau_{x',t}$ is P-unique. Assuming (a) and (b) in Table 4, we choose finite versions of $\tau_{x,t}$ and $\tau_{x',t}$ and define a *version of the atomic t-direct-effect variable* by

$$\delta_{xx',t} := \tau_{x,t} - \tau_{x',t}. \quad (10)$$

This definition implies that $\delta_{xx',t}$ is P-unique and finite.

If Z_t is a t-covariate of X, then, by definition, $\sigma(Z_t) \subset \sigma(C_{X,t}) \subset \mathscr{F}_t$. Therefore,

$$E^{X=x}(Y|C_{X,t}) \underset{P^{X=x}}{=} E^{X=x}(Y|C_{X,t}, Z_t), \qquad x \in \Omega'_X.$$

This means, with $C_{X,t}$ we control *for all t-covariates of X*. In intuitive terms, this means: With $C_{X,t}$ all potential confounders of t-direct effects or controlled. In other words, an atomic t-direct-effect variable is defined such that it cannot be biased (cf. sections "Basic Idea of Causal Effects" and "Unbiasedness").

Atomic Total-Effect Variable

If $t = t_X$, we omit the index t using

$$\tau_x := E^{X=x}(Y|C_X), \quad x \in \Omega'_X, \quad (11)$$

and

$$\delta_{xx'} := \tau_x - \tau_{x'}. \quad (12)$$

The random variable τ_x is called a *version of the total-effect true-outcome variable* pertaining to x, whereas $\delta_{xx'}$ is called a *version of the atomic total-effect variable* of x versus x'. Hence, an atomic total-effect variable is an atomic t_X-direct-effect variable.

In the example presented in Table 1, the atomic total-effect variable δ_{10} is identical to the difference $E^{X=1}(Y|U) - E^{X=0}(Y|U)$ taking the

value $\delta_{10}(\omega) = .10$ if $\omega \in \{U = Joe\}$ and the value $\delta_{10}(\omega) = .20$ if $\omega \in \{U = Ann\}$. It is a random variable on the probability space $(\Omega, \mathscr{A}, P)$, it is P-unique, and it is measurable with respect to U, i.e., $\sigma(\delta_{10}) \subset \sigma(U)$. In Example 2, the atomic total-effect variable δ_{10} is not defined, because $\tau_1 = E^{X=1}(Y|U)$ is not P-unique.

Adjusted ($X = x$)-Conditional Expectation

As explained above, the true-outcome variables and the atomic-effect variables are defined such that they cannot be biased, because, with $C_{X,t}$, all variables that could induce bias are controlled. In general, in applications, neither the true-outcome variables nor the atomic-effect variables can be observed or estimated. However, *expectations* and *conditional expectations* of the true-outcome variables and atomic-effect variables can be estimated, provided that appropriate assumptions can be made (see Causality Conditions and Identification of Causal Effects). Note that although reaggregated, these expectations and conditional expectations remain adjusted from bias. In general, the expectations and conditional expectations of the atomic-effect variables just *coarsen* the effects, they do not introduce bias.

The concept of a $C_{X,t}$-adjusted $(X = x)$-conditional expectation, denoted $E^{\bar{C}_{X,t}}(Y|X=x)$, is a good starting point. Under the assumptions (a) and (b) in Table 4, it exists and is defined as the expectation $E(\tau_{x,t})$ (see Table 4). Assumptions (a) and (b) in Table 4 imply that $E(\tau_{x,t})$ is uniquely defined and finite, which also means that $E(\tau_{x,t})$ does not depend on the choice of the version $\tau_{x,t} \in \mathscr{E}^{X=x}(Y|C_{X,t})$.

Average t-Direct Effect

If $E^{\bar{C}_{X,t}}(Y|X=x)$ and $E^{\bar{C}_{X,t}}(Y|X=x')$ exist, then the *average t-direct effect of x* versus x' is defined by

$$ADE_{xx',t} := E^{\bar{C}_{X,t}}(Y|X=x) - E^{\bar{C}_{X,t}}(Y|X=x'). \tag{13}$$

Note that

$$ADE_{xx',t} := E(\delta_{xx',t}) = E(\tau_{x,t}) - E(\tau_{x',t}). \tag{14}$$

Adjusted (X=x, W)-Conditional Expectation

So far two extremes have been considered, the true-outcome variables and their differences, the *atomic t-direct effects* on one side, and their expectations, the adjusted $(X=x)$-conditional expectations and their differences, the *average t-direct effects*, one the other side. *Conditional t-direct effects* are somewhere in between these two extremes. The basic idea is to consider a random variable W and the W-conditional expectations of the atomic t-direct effects given W. Because W can be multivariate, consisting of several univariate random variables $W_1, \ldots, W_m$, the degree of aggregation of the atomic t-direct effects depends on the choice of W. Note that W might also be continuous.

Again, begin with *a version of the $C_{X,t}$-adjusted $(X=x, W)$-conditional expectation of Y*. Under the assumptions (a) and (b) in Table 4, we define

$$E^{\bar{C}_{X,t}}(Y|X=x;W) := E\left(\tau_{x,t}|W\right), \tag{15}$$

call it *a version of the $C_{X,t}$-adjusted $(X=x, W)$-conditional expectation of Y*, and say that it *exists*. Assumptions (a) and (b) in Table 4 imply that there is a finite version $E\left(\tau_{x,t}|W\right)$, and P-uniqueness of $\tau_{x,t}$ implies that $E(\tau_{x,t}|W) \underset{P}{=} E(\tau^*_{x,t}|W)$ if $\tau_{x,t}, \tau^*_{x,t} \in \mathscr{E}^{X=x}\left(Y|C_{X,t}\right)$. Hence, there exists a finite version $E^{\bar{C}_{X,t}}(Y|X=x;W)$ and it is P-unique.

W-Conditional t-Direct-Effect Function

Assumptions (a) and (b) in Table 4 imply that there is a finite version $E^{\bar{C}_{X,t}}(Y|X=x;W)$ and a finite version $E^{\bar{C}_{X,t}}(Y|X=x';W)$. Choosing two such finite versions, we define

$$\begin{aligned} CDE_{xx',t}(W) := {} & E^{\bar{C}_{X,t}}(Y|X=x;W) \\ & -E^{\bar{C}_{X,t}}(Y|X=x';W), \end{aligned} \tag{16}$$

call it *a version of the W-conditional t-direct-effect function of x versus x'*, and say that it exists. Note that $CDE_{xx',t}(W)$ is P-unique and finite, and that

$$CDE_{xx',t}(W) \underset{P}{=} E\left(\delta_{xx',t}|W\right) \underset{P}{=} E\left(\tau_{x,t}|W\right) - E\left(\tau_{x',t}|W\right). \tag{17}$$

Average and Conditional Total Effects

Remember, $C_X := C_{X,t_X}$ and the atomic total effect has been defined as a special t-direct effect for $t = t_X$. Correspondingly, all average and conditional total effects will be defined as t_X-direct effects. Table 5 summarizes the various total effects.

Example 1 Continued

In the example displayed in Table 1, the expectations of the true-outcome variables $\tau_0 = E^{X=0}(Y|U)$ and $\tau_1 = E^{X=1}(Y|U)$ are

$$\begin{aligned} E(\tau_0) &= .70 \cdot P(U = Joe) + .20 \cdot P(U = Ann) \\ &= .70 \cdot .5 + .20 \cdot .5 = .45 \end{aligned}$$

and

$$\begin{aligned} E(\tau_1) &= .80 \cdot P(U = Joe) + .40 \cdot P(U = Ann) \\ &= .80 \cdot .5 + .40 \cdot .5 = .60. \end{aligned}$$

Hence, the expectation of $\delta_{10} = \tau_1 - \tau_0$ is

$$E(\delta_{10}) = E(\tau_1) - E(\tau_0) = .60 - .45 = .15.$$

In this example, the U-conditional total-effect function

$$CTE_{10}(U) \underset{P}{=} E(\delta_{10}|U) \tag{18}$$

can also considered. Because δ_{10} is measurable with respect to U, it follows that $E(\delta_{10}|U) = \delta_{10}$ [see Rule (vii) of Box 9.2 in Steyer et al., in press]. Later on, other examples are presented in which a Z-conditional total-effect function $CTE_{10}(Z)$ is considered, where Z denotes the random variable *sex* (see Table 10). In these examples, $CTE_{10}(Z) \neq CTE_{10}(U)$.

Indirect Effects

Indirect effects are simply differences between total and direct effects. Suppose that the assumptions (a) and (b) in Table 4 hold for t (with global covariate $C_{X,t}$) and for t_X (with global covariate C_X), where $t_X < t < t_Y$. Then the difference

$$\delta_{xx'} - \delta_{xx',t} \tag{19}$$

is called *a version of the atomic t-indirect effect variable of x versus x′*. Under the same assumptions, we define

$$AIE_{xx',t} := ATE_{xx'} - ADE_{xx',t}, \tag{20}$$

and call it *the average t-indirect effect*. Finally, and again under the same assumptions, we define

$$CIE_{xx',t}(W) := CTE_{xx'}(W) - CDE_{xx',t}(W) \tag{21}$$

and call it *the W-conditional t-indirect-effect function*.

Example 3: A Simple Path Model

Total, direct, and indirect effects are most easily illustrated by a computer simulation, such as the following one:

Causal Inference on Total, Direct, and Indirect Effects, Table 5 Adjusted conditional expectations and total effects

Let $\left((\Omega, \mathscr{A}, P), (\mathscr{F}_t)_{t\in T}, X, Y\right)$ be a causality space with discrete cause, let C_X be a global covariate of X, and let W be random variable on $(\Omega, \mathscr{A}, P)$	
$\mathscr{E}^{X=x}(Y\|C_X)$	*The set of all versions of the C_X-conditional expectation of Y with respect to $P^{X=x}$*, where $x \in \Omega'_X$
τ_x	*A version of the total-effect true-outcome variable*. $\tau_x := E^{X=x}(Y\|C_X)$
$\delta_{xx'}$	*A version of the atomic total-effect variable* of *x versus x′*. $\delta_{xx'} := \delta_{xx',t_X}$
$\bar{E}^{C_X}(Y\|X = x)$	*A version of the C_X-adjusted $(X = x)$-conditional expectation of Y*. $\bar{E}^{C_X}(Y\|X = x) := \bar{E}^{C_{X,t_X}}(Y\|X = x)$
$ATE_{xx'}$	*The average total effect of x versus x′*. $ATE_{xx'} := ADE_{xx',t_X}$
$\bar{E}^{C_X}(Y\|X = x; W)$	*A version of the C_X-adjusted $(X = x, W)$-conditional expectation of Y*. $\bar{E}^{C_X}(Y\|X = x; W) := \bar{E}^{C_{X,t_X}}(Y\|X = x; W)$
$CTE_{xx'}(W)$	*A version of the W-conditional total effect-function of x versus x′*. $CTE_{xx'}(W) := CDE_{xx',t_X}(W)$

(a) Sample a value of a normally distributed random variable Z with expectation 100 and standard deviation 10.
(b) Sample a value of a Bernoulli distributed random variable X with expectation. 5. Ensure that X and Z are independent. (This independence would also be created in a randomized experiment.)
(c) Compute a value of M by $M = 60 + 20 \cdot X + .3 \cdot Z + \varepsilon_M$, where ε_M is normally distributed with expectation 0 and standard deviation 3. Ensure that ε_M and (X, Z) are independent.
(d) Compute a value of Y by $Y = 80 + 10 \cdot X + .7 \cdot Z + .5 + \varepsilon_Y$, where ε_Y is normally distributed with expectation 0 and standard deviation 3. Ensure that ε_Y and (X, Z, M) are independent.

Repeating steps (a) to (d) n times would yield a concrete sample of size n and a data matrix of type $n \times 4$.

The dependencies between the four random variables are perfectly described by the two regression equations

$$E(M|X,Z) \underset{P}{=} 60 + 20 \cdot X + 0.30 \cdot Z. \qquad (22)$$

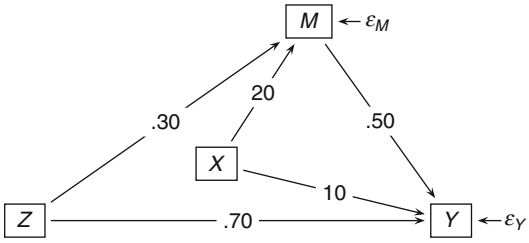
and

$$E(Y|X,M,Z) \underset{P}{=} 80 + 10 \cdot X + 0.70 \cdot Z + 0.50 \cdot M, \qquad (23)$$

which, except for the intercepts, can also be represented by the path diagram displayed in Fig. 3. For didactic purposes, this example is confined to linear parameterizations of the regressions without interactions. However, the general theory of causal effects, outlined in this entry, can accommodate much more complex models.

Now let us construct the causality space, in particular the probability space $(\Omega, \mathscr{A}, P)$ and the filtration $(\mathscr{F}_t)_{t\in T}$. The set of possible outcomes is

$$\Omega = \mathbb{R} \times \Omega_X \times \mathbb{R} \times \mathbb{R},$$



Causal Inference on Total, Direct, and Indirect Effects, Fig. 3 A path diagram representing a causal process with a single mediator M

where $\Omega_X = \{0, 1\}$, the σ-algebra on Ω is the product σ-algebra

$$\mathscr{A} = \mathscr{B} \otimes \mathscr{P}(\Omega_X) \otimes \mathscr{B} \otimes \mathscr{B}$$

(see Steyer et al., in press, Chap. 1), and the probability measure P on $(\Omega, \mathscr{A})$ is specified by the distributional assumptions described in points (a) to (d) above. Now, X, Y, Z, and M are random variables on $(\Omega, \mathscr{A}, P)$ and a filtration $(\mathscr{F}_t)_{t\in T}$ in $\mathscr{A}$ can be specified by: $\mathscr{F}_1 = \sigma(Z), \mathscr{F}_2 = \sigma(Z, X), \mathscr{F}_3 = \sigma(Z, X, M)$, and $\mathscr{F}_4 = \mathscr{A} = \sigma(Z, X, M, Y)$.

Furthermore, total, direct, and indirect effects are specified in this example, starting with *atomic total-effect variable* δ_{10}. In this example, Z is a global covariate of X, because $\sigma(Z, X) = \mathscr{F}_2 = \mathscr{F}_{t_X}$. Therefore, $\tau_0 := E^{X=0}(Y|C_X) = E^{X=0}(Y|Z)$, $\tau_1 := E^{X=1}(Y|C_X) = E^{X=1}(Y|Z)$, and

$$\delta_{10} := \tau_1 - \tau_0 = E^{X=1}(Y|Z) - E^{X=0}(Y|Z).$$

Hence, in order to specify δ_{10}, the conditional expectations $E^{X=0}(Y|Z)$ and $E^{X=1}(Y|Z)$ have to be computed. As a first step, using the rules of computation for regressions (see Steyer et al., in press, Box 9.2), compute

$$\begin{aligned} E(Y|X,Z) &\underset{P}{=} E[E(Y|X,M,Z)|X,Z] \\ &\underset{P}{=} E(80 + 10 \cdot X + .7 \cdot Z + .5 \cdot M|X,Z) \quad [(23)] \\ &\underset{P}{=} 80 + 10 \cdot X + .7 \cdot Z + .5 \cdot E(M|X,Z) \\ &\underset{P}{=} 80 + 10 \cdot X + .7 \cdot Z + \\ &\quad .5 \cdot (60 + 20 \cdot X + .3 \cdot Z) \quad [(22)] \\ &\underset{P}{=} 110 + 20 \cdot X + .85 \cdot Z. \end{aligned}$$

Now, independence of X and Z implies that the regressions $E^{X=x}(Y|Z)$ are P-unique. Hence,

$$E^{X=0}(Y|Z) \underset{P}{=} 110 + .85 \cdot Z,$$
$$E^{X=1}(Y|Z) \underset{P}{=} 130 + .85 \cdot Z$$

(see Sect. 13.4 of Steyer et al., in press) and

$$\delta_{10} = \tau_1 - \tau_0 \underset{P}{=} E^{X=1}(Y|Z) - E^{X=0}(Y|Z) \underset{P}{=} 20.$$

Hence, in this example, the atomic total-effect function δ_{10} is constant and therefore, its expectation, the average total effect, is

$$ATE_{10} = E(\delta_{10}) = E(20) = 20.$$

The same applies to the Z-conditional total-effect function

$$CTE_{10}(Z) \underset{P}{=} E(\delta_{10}|Z) \underset{P}{=} E(20|Z) \underset{P}{=} 20.$$

Now consider the atomic $t_3 = t_M$-direct-effect variable

$$\begin{aligned}\delta_{10,t_M} &= \tau_{1,\,t_M} - \tau_{0,\,t_M} \\ &= E^{X=1}\left(Y|C_{X,\,t_M}\right) - E^{X=0}\left(Y|C_{X,\,t_M}\right).\end{aligned}$$

In this example, the bivariate random variable (Z, M) is a global t_M-covariate of X, because $\sigma(Z, M, X) = \mathscr{F}_{tM} = \mathscr{F}_3$. Furthermore, because $P(X = x|Z, M) \underset{P}{>} 0$, the regressions $E^{X=x}(Y|Z, M)$ are P-unique (see Steyer et al., in press, Chap. 13). This implies

$$\begin{aligned}\delta_{10,\,t_M} = \tau_{1,\,t_M} - \tau_{0,\,t_M} &\underset{P}{=} E^{X=1}(Y|Z, M) \\ &- E^{X=0}(Y|Z, M).\end{aligned}$$

Equation (23) implies

$$E^{X=0}(Y|Z, M) \underset{P}{=} 80 + .7 \cdot Z + .5 \cdot M$$

and

$$E^{X=1}(Y|Z, M) \underset{P}{=} 90 + .7 \cdot Z + .5 \cdot M.$$

Therefore

$$\begin{aligned}\delta_{10,\,t_M} &\underset{P}{=} 90 + .7 \cdot Z + .5 \cdot M \\ &- (80 + .7 \cdot Z + .5 \cdot M) = 10,\end{aligned}$$

which, in this example, is a constant, too. Hence, the average t_M-direct effect is

$$ADE_{10,\,t_M} = E\left(\delta_{10,\,t_M}\right) = E(10) = 10,$$

and the Z-conditional t_M-direct-effect function is

$$CDE_{10,\,t_M}(Z) \underset{P}{=} E\left(\delta_{10,\,t_M}|Z\right) \underset{P}{=} E(10|Z) \underset{P}{=} 10.$$

Finally, in this example, the atomic *t_M-indirect-effect variable* is

$$\delta_{10} - \delta_{10,\,t_M} \underset{P}{=} 20 - 10 = 10,$$

again a constant. Hence, $AIE_{10,\,t_M} = E(\delta_{10} - \delta_{10,t_M})$ and $AIE_{10,\,t_M}(Z) = E\left(\delta_{10} - \delta_{10,\,t_M}|Z\right)$ are equal to 10 as well. Obviously, our results are in line with the well-known rules of computing total, direct, and indirect effects in linear path models (see, e.g., Bollen, 1987). However, while those are restricted to linear path models and exclude interactions, our theory applies irrespective of how the regressions involved are parameterized.

In this example, two observations are worthwhile mentioning. First, independence of X and Z implies that the total effect of X on Y is Z-unbiased. However, even though X and Z are independent, omitting Z yields a seriously biased direct effect (see Mayer et al., submitted for a detailed presentation).

Second, note that, in this particular example, $\mathscr{A} = \sigma(Z, X, M, Y)$ and the joint distribution of these four random variables determines the probability measure P on $(\Omega, \mathscr{A})$. In this sense, our example is a *closed system*. In this particular example, there are no random variables that are not measurable with respect to $\sigma(Z, X, M, Y)$. Such a closed system is realistic in the computer sciences and in engineering. In many other empirical sciences, the situation is

different: there, $\sigma(Z,X,M,Y) \subset \mathscr{A}$, but not $\sigma(Z,X,M,Y) = \mathscr{A}$. In the theory of causal effects, not only the random variables such as X, Y, Z, and M are needed, but also a probability space $(\Omega, \mathscr{A}, P)$ and a filtration $(\mathscr{F}_t)_{t\in T}$, which are constructed such that *all pretreatment variables* – and not only Z – are measurable with respect to $\mathscr{A}$. Similarly, if considering direct effects, $\mathscr{F}_{t_M}$ has to be constructed in such a way that all variables that are simultaneous or prior to M have to be measurable with respect to $\mathscr{F}_{t_M}$. Only with reference to them the relationship between the included variables such as X, Y, Z, and M, and omitted variables that may create bias can be specified. In other words, in serious empirical applications, $(\Omega, \mathscr{A}, P)$ and $(\mathscr{F}_t)_{t\in T}$ have to be constructed such that they represent the real world. Only then is it possible to investigate if it is sufficient to consider the variables such as X, Y, Z, and M that occur in our regression models. It is exactly the relationship between the included and omitted variables that is at issue in the definition of unbiasedness and other causality conditions.

Causality Conditions and Identification of Causal Effects

So far, the concepts of atomic, average, and conditional total, direct, and indirect effects have been defined and illustrated, confining the presentation to experiments or quasi-experiments. Now causal inference is treated: How to infer from empirically estimable quantities to these causal effects? How to identify the various causal effects and effect functions from empirically estimable quantities? The key is to link the causal effects to estimable quantities by an *unbiasedness assumption*. Although such an unbiasedness assumption is not empirically testable itself, it is implied by a number of *causality conditions*, some of which *are* empirically testable.

Unbiasedness

Unbiasedness of the Conditional Expectations $E(Y|X=x)$ and $E(Y|X)$

Let $\tau_{x,\,t}$ be a version of the true-outcome variable with respect to t and $E^{\bar{C}_{X,t}}(Y|X=x)$ a version of the $C_{X,t}$-adjusted $(X=x)$-conditional expectation of Y (see Table 4). Then the conditional expectation $E(Y|X=x)$ is called $C_{X,t}$-*unbiased*, if

$$E(Y|X=x) = E^{\bar{C}_{X,t}}(Y|X=x). \tag{24}$$

Because $E^{\bar{C}_{X,t}}(Y|X=x) = E(\tau_{x,\,t})$, it follows: If $E^{\bar{C}_{X,t}}(Y|X=x)$ exists, then the conditional expectation $E(Y|X=x)$ is $C_{X,t}$-unbiased if and only if

$$E(Y|X=x) = E(\tau_{x,\,t}). \tag{25}$$

Finally, because it is presumed that X is discrete with $P(X=x) > 0$ for all its values, we can define $C_{X,t}$-*unbiasedness of the conditional expectation* $E(Y|X)$ by

$$E(Y|X=x) = E^{\bar{C}_{X,t}}(Y|X=x), \quad \forall x \in \Omega'_X. \tag{26}$$

Unbiasedness of the Conditional Expectations $E^{X=x}(Y|W)$ and $E(Y|X,W)$

In Table 4 we defined $E^{\bar{C}_{X,t}}(Y|X=x;W) := E(\tau_{x,t}|W)$, a version of the $C_{X,t}$-adjusted $(X=x,W)$-conditional expectation of Y. Referring to this term, $E^{X=x}(Y|W)$ is called $(C_{X,t};W)$-*unbiased*, if

$$E^{X=x}(Y|W) \underset{P}{=} E^{\bar{C}_{X,t}}(Y|X=x;W). \tag{27}$$

Again, if $E^{\bar{C}_{X,t}}(Y|X=x;W)$ exists, we can conclude that $E^{X=x}(Y|W)$ is $(C_{X,t};W)$-unbiased if and only if

$$E^{X=x}(Y|W) \underset{P}{=} E(\tau_{x,t}|W). \tag{28}$$

Finally, because we confine ourselves to the case in which X is discrete with $P(X=x) > 0$ for all its values, $(C_{X,t};W)$-*unbiasedness of the conditional expectation* $E(Y|X,W)$ can be defined by

$$E^{X=x}(Y|W) \underset{P}{=} E^{\bar{C}_{X,t}}(Y|X=x;W), \quad \forall x \in \Omega'_X. \tag{29}$$

Usually, unbiasedness cannot be tested empirically, at least not for all values of X, because it involves the true-outcome variables that cannot be estimated unless overly strong assumptions are introduced. However, there are a number of conditions implying unbiasedness and identifiability of causal effects. Conditions that imply unbiasedness are called *causality conditions*, and some of these *can* be tested empirically. We present two kinds of such testable conditions and a third kind that cannot be tested empirically. In the first kind of these conditions, we consider the relationship between X and $C_{X,t}$, and in the second, the relationship between Y and $C_{X,t}$. The third, which is analog to Rosenbaum and Rubin's *strong ignorability* (see Rosenbaum & Rubin, 1983), is implied by both kinds of causality conditions.

Causal Inference on Total, Direct, and Indirect Effects, Table 6 Some causality conditions

Let $\left((\Omega,\mathscr{A},P),(\mathscr{T}_t)_{t\in T},X,Y\right)$ be a causality space with discrete cause, let $C_{X,t}$ be a global t-covariate of X, let Z_t be a t-covariate of X, i.e., let $\sigma(Z_t)\subset\sigma(C_{X,t})$, and let $\tau_{x,t}=E^{X=x}(Y\|C_{X,t})$ denote a version of the true-outcome variable with respect to t
Conditions Implying $C_{X,t}$-Unbiasedness of $E(Y\|X)$
CC1 $\quad\forall x\in\Omega'_X: P(X=x\|C_{X,t})\underset{P}{=}P(X=x)$
CC2 $\quad\forall x\in\Omega'_X: E^{X=x}(Y\|C_{X,t})\underset{P}{=}E^{X=x}(Y)$
CC3 $\quad\forall x\in\Omega'_X: P(X=x\|\tau_{x,t})\underset{P}{=}P(X=x)$
(CC1 $\vee$ CC2) $\Rightarrow$ CC3 $\Rightarrow$ $E(Y\|X)$ is $C_{X,t}$-unbiased
Conditions Implying $(C_{X,t};Z_t)$-Unbiasedness of $E(Y\|X,Z_t)$
CC1Z $\quad\forall x\in\Omega'_X: P(X=x\|C_{X,t})\underset{P}{=}P(X=x\|Z_t)$
CC2Z $\quad\forall x\in\Omega'_X: E^{X=x}(Y\|C_{X,t})\underset{P}{=}E^{X=x}(Y\|Z_t)$
CC3Z $\quad\forall x\in\Omega'_X: P(X=x\|\tau_{x,t},Z_t)\underset{P}{=}P(X=x\|Z_t)$
(CC1Z $\vee$ CC2Z) $\Rightarrow$ CC3Z $\Rightarrow$ $E(Y\|X,Z_t)$ is $(C_{X,t};Z_t)$-unbiased

Independence of X and the Global t-Covariate

Identification of the Average t-Direct Effect

The first and simplest causality condition is CC1 presented in Table 6. Using the notation $P(X=x|C_{X,t}):=E(1_{X=x}|C_{X,t})$, where $1_{X=x}$ denotes the indicator variable of the event $\{X=x\}$, CC1 is equivalent to

$$P\left[\{\omega\in\Omega:\ P(X=x|C_{X,t})(\omega)=P(X=x)\}\right]=1,\quad\forall x\in\Omega'_X. \tag{30}$$

This condition is also equivalent to *stochastic independence* of X and $C_{X,t}$, which is symbolized by $X\perp\!\!\!\perp C_{X,t}$.

Under the assumptions (a) to (d) in Table 3, CC1 implies P-uniqueness of the true-outcome variables $\tau_{x,t}$, and that the conditional expectations $E(Y|X=x)$ and $E(Y|X)$ are unbiased. Furthermore, CC1 also implies that $ADE_{xx',t}$ is identified by $E(Y|X=x)-E(Y|X=x')$ (see Eqs. 1 and 2 in Table 7). Note that this difference can be estimated in a sample of (X,Y). Unfortunately, CC1 cannot deliberately be *created* by design techniques *unless* $t=t_X$. However, CC1 can easily be *tested*, because, if W_t is a t-covariate of X, then $\sigma(W_t)\subset\sigma(C_{X,t})$, and CC1 implies

$$P(X=x|W_t)\underset{P}{=}P(X=x),\quad\forall x\in\Omega'_X. \tag{31}$$

Hence, if this equation does not hold, then CC1 cannot hold as well. Because $\tau_{x,t}$ is measurable with respect to $C_{X,t}$, the third causality condition, CC3 (see Table 6), follows from CC1. However, in contrast to CC1, the condition CC3 is not empirically testable.

From a methodological point of view, the case $t=t_X$ is of special interest. If $t_X<t<t_Y$ and CC1 holds for t, then it also holds for t_X, because $\sigma(C_X)\subset\sigma(C_{X,t})$ (see the definitions of $C_{X,t}$ and C_X, as well as the definition of conditional independence of set systems in Steyer et al., in press, Chap. 4), and the average t-direct effect is identical to the average total effect.

Identification of the Average Total Effect

We defined $C_X=C_{X,t_X}$ and $ATE_{xx'}=ADE_{xx',t_X}$. Therefore, for $t=t_X$, condition CC1 can be written $P(X=x|C_X)\underset{P}{=}P(X=x),\forall x\in\Omega'_X$, and Eqs. 1 and 2 in Table 7 yield Eqs. 1 and 2 in Table 8. Hence, if CC1 holds for $t=t_X$, then the average total effect of x versus x' is identical to $E(Y|X=x)-E(Y|X=x')$.

Causal Inference on Total, Direct, and Indirect Effects, Table 7 Identification of t-direct effects and t-direct-effect functions

Let $\big((\Omega, \mathscr{A}, P), (\mathscr{F}_t)_{t\in T}, X, Y\big)$ be a causality space with discrete cause, let $C_{X,t}$ be a global t-covariate of X, let $x, x' \in \Omega'_X = \{0, 1, \ldots, n\}$, and let Z_t be a t-covariate of X. Furthermore, remember: (CC1 $\vee$ CC2) $\Rightarrow$ CC3 and (CC1Z $\vee$ CC2Z) $\Rightarrow$ CC3Z

Average t-direct effects

CC3 $\Rightarrow$ (1) $\bar{E}^{C_{X,t}}(Y|X=x) = E(Y|X=x), \quad \forall x \in \Omega'_X.$

$\Rightarrow$ (2) $ADE_{xx',t} = E(Y|X=x) - E(Y|X=x').$

CC3Z $\Rightarrow$ (3) $\bar{E}^{C_{X,t}}(Y|X=x) = E\big[E^{X=x}(Y|Z_t)\big], \quad \forall x \in \Omega'_X.$

$\Rightarrow$ (4) $ADE_{xx',t} = E\big[E^{X=x}(Y|Z_t)\big] - E\big[E^{X=x'}(Y|Z_t)\big].$

Z_t-conditional t-direct-effect functions

CC3Z $\Rightarrow$ (5) $\bar{E}^{C_{X,t}}(Y|X=x;Z_t) \underset{P}{=} E^{X=x}(Y|Z_t), \quad \forall x \in \Omega'_X.$

$\Rightarrow$ (6) $CDE_{xx',t}(Z_t) \underset{P}{=} E^{X=x}(Y|Z_t) - E^{X=x'}(Y|Z_t).$

Coarsened t-direct-effect functions

If Z_{0t} is a random variable on $(\Omega, \mathscr{A}, P)$ and $\sigma(Z_{0t}) \subset \sigma(X, Z_t)$, then

CC3Z $\Rightarrow$ (7) $\bar{E}^{C_{X,t}}(Y|X=x;Z_{0t}) \underset{P}{=} E\big[E^{X=x}(Y|Z_t)|Z_{0t}\big], \quad \forall x \in \Omega'_X.$

$\Rightarrow$ (8) $CDE_{xx',t}(Z_{0t}) \underset{P}{=} E\big[E^{X=x}(Y|Z_t)|Z_{0t}\big] - E\big[E^{X=x'}(Y|Z_t)|Z_{0t}\big].$

Causal Inference on Total, Direct, and Indirect Effects, Table 8 Identification of total effects and total-effect functions

Let $\big((\Omega, \mathscr{A}, P), (\mathscr{F}_t)_{t\in T}, X, Y\big)$ be a causality space with discrete cause, let C_X be a global covariate of X, let $x, x' \in \Omega'_X = \{0, 1, \ldots, n\}$, and let Z denote a covariate of X, i.e., let $\sigma(Z) \subset C_X$. Again remember: (CC1 $\vee$ CC2) $\Rightarrow$ CC3 and (CC1Z $\vee$ CC2Z) $\Rightarrow$ CC3Z

Average total effects

CC3 $\Rightarrow$ (1) $\bar{E}^{C_X}(Y|X=x) = E(Y|X=x).$

$\Rightarrow$ (2) $ATE_{xx'} = E(Y|X=x) - E(Y|X=x').$

CC3Z $\Rightarrow$ (3) $\bar{E}^{C_X}(Y|X=x) = E\big[E^{X=x}(Y|Z)\big].$

$\Rightarrow$ (4) $ATE_{xx'} = E\big[E^{X=x}(Y|Z)\big] - E\big[E^{X=x'}(Y|Z)\big].$

Z-conditional total-effect functions

CC3Z $\Rightarrow$ (5) $\bar{E}^{C_X}(Y|X=x;Z) \underset{P}{=} E^{X=x}(Y|Z).$

$\Rightarrow$ (6) $CTE_{xx'}(Z) \underset{P}{=} E^{X=x}(Y|Z) - E^{X=x'}(Y|Z).$

Coarsened total-effect functions

If Z_0 is a random variable on $(\Omega, \mathscr{A}, P)$ and $\sigma(Z_0) \subset \sigma(X, Z)$, then

CC3Z $\Rightarrow$ (7) $\bar{E}^{C_X}(Y|X=x;Z_0) \underset{P}{=} E\big[E^{X=x}(Y|Z)|Z_0\big].$

$\Rightarrow$ (8) $CTE_{xx'}(Z_0) \underset{P}{=} E\big[E^{X=x}(Y|Z)|Z_0\big] - E\big[E^{X=x'}(Y|Z)|Z_0\big].$

From a methodological point of view, it is important to note that in the kind of random experiments described in section "Conceptual Framework," condition CC1 with $t = t_X$ can deliberately be created by the design technique of randomly assigning the person to one of the treatment conditions x.

Example 4: Joe and Ann with Random Assignment The third part of Table 2 displays a random experiment in which the causality space is identical to the one described in Example 1 except for the probability measure P. Now this measure is constructed such that X and U are independent, which follows from the fact that

$E(X|U) = P(X=1|U)$ is constant. Because, in this example, U is a global covariate of X, the conditional expectations $E(Y|X=x)$ as well as $E(Y|X)$ are U-unbiased and

$$ATE_{10} = E(Y|X=1) - E(Y|X=0) = .60 - .45 = .15$$

(see Table 8, Eqs. 1 and 2).

Regressive Independence of Y from the Global t-Covariate

Identification of the Average t-Direct Effect

Condition CC2 comprises the following two assumptions:
(a) $E^{X:=x}(Y|C_{X,t})$ is P-unique, $\forall x \in \Omega'_X$, and
(b) $E^{X:=x}(Y|C_{X,t}) \underset{P^{X:=x}}{=} E^{X:=x}(Y)$, $\forall x \in \Omega'_X$,
which can also be expressed by $E^{X:=x}(Y|C_{X,t}) \underset{P}{=} E^{X:=x}(Y)$, for all $x \in \Omega'_X$ (see Table 6). CC2 implies $C_{X,t}$-unbiasedness of the conditional expectations $E(Y|X=x)$ and of $E(Y|X)$, and that $ADE_{xx',t}$ is identified by $E(Y|X=x) - E(Y|X=x')$ (see Eqs. 1 and 2 in Table 7). CC2 also implies CC3, because it can also be written $\tau_{x,t} \underset{P}{=} E^{X:=x}(Y)$, for all $x \in \Omega'_X$. Hence, $\tau_{x,t}$ are constants with probability 1, and therefore, $\tau_{x,t}$ and X are independent (see Chap. 5 of Steyer et al., in press).

Methodologically speaking, CC2 can neither be created by randomization nor by covariate selection. Whether or not it holds depends on the random experiment, i.e., the empirical phenomenon considered. This remark also applies if $t = t_X$.

Identification of the Average Total Effect

For $t = t_X$ we defined $C_X = C_{X,t}$ and $ATE_{xx'} = ADE_{xx',t}$. If $t = t_X$ and CC2 holds, then Eqs. 1 and 2 in Table 7 yield Eqs. 1 and 2 in Table 8. Hence, if CC2 holds for $t = t_X$, then the average total effect of x versus x' is identical to $E(Y|X=x) - E(Y|X=x')$.

Example 5: Joe and Ann Homogeneous

The fourth part of Table 2 displays another example with Joe and Ann. Again, the causality space is almost the same as in Example 1 and U is a global covariate of X. However, now the probability measure P is such that Joe and Ann are homogeneous. More precisely, the two true-outcome variables τ_0 and τ_1 are constant (see Table 2). According to Table 8, this implies that the conditional expectations $E(Y|X=x)$ and $E(Y|X)$ are U-unbiased and

$$ATE_{10} = E(Y|X=1) - E(Y|X=0) = .80 - .70 = .10$$

(see Table 8, Eqs. 1 and 2)

Z_t-Conditional Independence of X and the Global Covariate

Identification of Z_t-Conditional t-Direct-Effect Functions

Causality condition CC1Z (see Table 6) implies that the regressions $E^{X:=x}(Y|Z_t), E(Y|X,Z_t)$, and the Z_t-conditional direct-effect functions $E^{X:=x}(Y|Z_t) - E^{X:=x'}(Y|Z_t)$ are $(C_{X,t}, Z_t)$-unbiased (see Eqs. 5 and 6 in Table 7). These effect functions can be estimated in a sample of (X, Y, Z_t). CC1Z can easily be tested, because, if W_t is a t-covariate of X, then $\sigma(W_t) \subset \sigma(X_{X,t})$, and CC1Z implies

$$P(X=x|Z_t, W_t) \underset{P}{=} P(X=x|Z_t), \quad \forall x \in \Omega'_X. \tag{32}$$

Furthermore, CC1Z implies CC3Z, because the true-outcome variables $\tau_{x,t}$ are measurable with respect to $C_{X,t}$. However, CC3Z itself is not empirically testable.

From a methodological point of view, it is of interest that CC1Z may be created by *covariate selection*, i.e., by choosing Z_t, a (possiblymultivariate) t-covariate of X, such that CC1Z holds.

Identification of Z-Conditional Total Effects

We defined $C_X = C_{X,t_X}$ and $CTE_{xx'}(W) = CDE_{xx',t_X}(W)$, where W is any random variable on $(\Omega, \mathscr{A}, P)$ (see Table 5). Hence, if $t = t_X$ and

Causal Inference on Total, Direct, and Indirect Effects, Table 9 Four persons with Z-conditional random assignment

Outcomes ω		Observables				Regressions							
Unit Treatment Success	$P(\{\omega\})$	Person variable U	Sex Z	Treatmentvariable X	Outcome variable Y	$E(Y\|X,U)$	$E(Y\|X,Z)$	$E(Y\|X)$	$P(X=1\|U)$	$E^{X=0}(Y\|U)$	$E^{X=1}(Y\|U)$	$E^{X=0}(Y\|U,Z)$	$E^{X=1}(Y\|U,Z)$
(*Joe*, *no*, −)	.03	*Joe*	*m*	0	0	.7	.5	.50	.6	.7	.8	.5	.5
(*Joe*, *no*, +)	.07	*Joe*	*m*	0	1	.7	.5	.50	.6	.7	.8	.5	.5
(*Joe*, *yes*, −)	.03	*Joe*	*m*	1	0	.8	.5	.45	.6	.7	.8	.5	.5
(*Joe*, *yes*, +)	.12	*Joe*	*m*	1	1	.8	.5	.45	.6	.7	.8	.5	.5
(*Jim*, *no*, −)	.07	*Jim*	*m*	0	0	.3	.5	.50	.6	.3	.2	.5	.5
(*Jim*, *no*, +)	.03	*Jim*	*m*	0	1	.3	.5	.50	.6	.3	.2	.5	.5
(*Jim*, *yes*, −)	.12	*Jim*	*m*	1	0	.2	.5	.45	.6	.3	.2	.5	.5
(*Jim*, *yes*, +)	.03	*Jim*	*m*	1	1	.2	.5	.45	.6	.3	.2	.5	.5
(*Sue*, *no*, −)	.04	*Sue*	*f*	0	0	.8	.5	.50	.2	.8	.2	.5	.3
(*Sue*, *no*, +)	.16	*Sue*	*f*	0	1	.8	.5	.50	.2	.8	.2	.5	.3
(*Sue*, *yes*, −)	.04	*Sue*	*f*	1	0	.2	.3	.45	.2	.8	.2	.5	.3
(*Sue*, *yes*, +)	.01	*Sue*	*f*	1	1	.2	.3	.45	.2	.8	.2	.5	.3
(*Ann*, *no*, −)	.16	*Ann*	*f*	0	0	.2	.5	.50	.2	.2	.4	.5	.3
(*Ann*, *no*, +)	.04	*Ann*	*f*	0	1	.2	.5	.50	.2	.2	.4	.5	.3
(*Ann*, *yes*, −)	.03	*Ann*	*f*	1	0	.4	.3	.45	.2	.2	.4	.5	.3
(*Ann*, *yes*, +)	.02	*Ann*	*f*	1	1	.4	.3	.45	.2	.2	.4	.5	.3

Z denotes a covariate of X, then CC1Z can be written as

$$P(X=x|C_X) \underset{P}{=} P(X=x|Z), \quad \forall x \in \Omega'_X, \qquad (33)$$

and Eqs. 5 and 6 of Table 7 yield Eqs. 5 and 6 of Table 8. Hence, if $t = t_X$ and CC1Z holds, then the Z-conditional total-effect function of x versus x' is P-equivalent to $E^{X:=x}(Y|Z) - E^{X:=x'}(Y|Z)$.

Methodologically speaking, Eq. 35 can be ensured if the experimenter fixes the probability functions $P(X = x|Z)$ for all $x \in \Omega'_X$. This design technique is called *Z-conditional randomization*.

Example 6: Four Persons with *Z*-Conditional Random Assignment

Table 9 displays another example, this time with four persons. The same example is presented in compressed from in the first part of Table 10. The causality space is constructed in the same way as in Example 1. The filtration still consists of three σ-algebras, which are defined in the same way as in Example 1, although these σ-algebras now have more elements. For example, $\mathscr{A} = \mathscr{F}_3$ has $2^{16} = 65536$ elements.

In this example, we can consider Z-conditional total effects. Again, U is a global covariate of X. Because CC1Z holds, we can use Eq. 6 in Table 8 to compute $CTE_{10}(Z) = E^{X:=1}(Y|Z) - E^{X:=0}(Y|Z)$. Hence, we only have to take the difference between the last two columns displayed in Table 9. This yields .5 −.5 = 0 for the males and .3 −.5 = −.2 for the females, the same result obtained using the equation for the definition of $CTE_{10}(Z)$ (see Table 4).

Causal Inference on Total, Direct, and Indirect Effects, Table 10 Two random experiments with four persons – compressed

Random experiment	u	$P(U=u)$	Sex	$E^{X=0}(Y\|U=u)$	$E^{X=1}(Y\|U=u)$	$P(X=1\|U=u)$	$E^{X=0}(Y\|Z=z)$	$E^{X=1}(Y\|Z=u)$
1. With Z-conditional random assignment	*Joe*	1/4	*m*	.7	.8	.6	.5	.5
	Jim	1/4	*m*	.3	.2	.6	.5	.5
	Sue	1/4	*f*	.8	.2	.2	.5	.3
	Ann	1/4	*f*	.2	.4	.2	.5	.3
2. Z-conditionally homogeneous	*Joe*	1/4	*m*	.7	.8	.2	.7	.8
	Jim	1/4	*m*	.7	.8	.6	.7	.8
	Sue	1/4	*f*	.2	.4	.4	.2	.4
	Ann	1/4	*f*	.2	.4	.8	.2	.4

Z_t-Conditional Regressive Independence of Y from the Global Covariate

Identification of the Z_t-Conditional t-Direct-Effect Function

Causality condition CC2Z is defined by $E^{X=x}(Y|C_{X,t}) =_P E^{X=x}(Y|Z_t)$. It implies:

(a) $E^{X=x}(Y|C_{X,t})$ is P-unique, $\forall x \in \Omega'_X$, and
(b) $E^{X=x}(Y|C_{X,t}) =_{P^{X=x}} E^{X=x}(Y|Z_t)$, $\forall x \in \Omega'_X$,

where Z_t denotes a t -covariate of X. Just like CC1Z, this condition also implies CC3Z, because $E^{X=x}(Y|Z_t) =_P \tau_{x,t}$ if CC2Z holds, and this means that $\tau_{x,t}$ does not contain more information than Z_t.

Under CC2Z, the regressions $E^{X=x}(Y|Z_t)$ and $E(Y|X,Z_t)$, as well as the differences $E^{X=x}(Y|Z_t) - E^{X=x'}(Y|Z_t)$ are P-unique and $(C_{X,t}, Z_t)$-unbiased, and we can use Eqs. 5 and 6 in Table 7 for identifying $E^{\bar{C}_{X,t}}(Y|X=x;Z_t)$ and $CDE_{xx',t}(Z_t)$, respectively.

Condition CC2Z *can* be used for covariate selection. In this case, we refer to *t-covariates* of X, i.e., random variables that are prior, simultaneous, or posterior to X. The only requirement is that they are measurable with respect to $C_{X,t}$, i.e., $\sigma(Z_t) \subset \sigma(C_{X,t})$. In other words, they have to be prior or simultaneous to t. [Remember that t refers to any element of T with $t_X \leq t < t_Y$ (see the definition of a global t-covariate in Table 3).]

Identification of the Z-Conditional Total-Effect Function

For $t = t_X$ we defined $C_X = C_{X,t}$ and $CTE_{xx'}(W) = CDE_{xx',t}(W)$, where W denoted any random variable on $(\Omega, \mathscr{A}, P)$. If $t = t_X$ and CC2Z holds for a covariate Z of X, then Eqs. 5 and 6 in Table 7 yield Eqs. 5 and 6 in Table 8. Hence, if CC2Z holds for $t = t_X$, then the Z-conditional total-effect function $CTE_{xx'}(Z)$ is P-equivalent to $E^{X=x}(Y|Z) - E^{X=x'}(Y|Z)$. Note that CC2Z *can* be used for covariate selection, i.e., for selecting covariates of X that are prior or simultaneous to X.

Example 7: Four Persons with Z-Conditional Homogeneity

The second part of Table 10 presents an example in which CC2Z holds. Again, the causality space is constructed in the way as in Example 1. Only the probability measure P is such that CC2Z (and therefore, CC3Z) holds. Therefore, we can take the difference $E^{X=x}(Y|Z) - E^{X=x'}(Y|Z)$ to identify the Z-conditional total-effect function $CTE_{xx'}(Z)$. Its value is $.80 - .70 = .10$ if $\omega \in \{Z=m\}$ and $.40 - .20 = .20$ if $\omega \in \{Z=f\}$.

Coarsening Effect Functions

Once the adjusted $(X=x, Z_t)$-conditional expectations and Z_t-conditional effect functions are identified, we can coarsen them according to our substantive questions. Coarsening can yield the average effects or it can yield Z_{0t}-conditional effect functions, where Z_{0t} is a Z_t-measurable random variable. For example, if $Z_{t_X} = Z = (Z_1, Z_2)$ consists of sex (Z_1) and pretest (Z_2), then we may just be interested in the sex-specific total effects and coarsen the Z-conditional total effect function, computing the Z_1-conditional total effect function. Alternatively, we may also compute the Z_2-conditional total effect functions.

Table 7 contains the relevant formulas for t-direct-effect functions. If CC1Z or CC2Z holds, then the adjusted $(X = x)$-conditional expectation $E^{\bar{C}_{X,t}}(Y|X=x)$ is identified by the expectation of $E^{X=x}(Y|Z_t)$ (see Eq. 3), and the average t-direct effect $ADE_{xx',t}$ by the difference between two such expectations (see Eq. 4). Similarly, if we want to consider a Z_{0t}-conditional t-direct effect function that is less fine-grained than the Z_t-conditional t-direct effect function, then Eqs. 7 and 8 of Table 7 are the relevant formulas. The corresponding formulas for total effects are Eqs. 3 and 4 in Table 8 for the average total effects, and Eqs. 7 and 8 in the same table for the average W-conditional t-direct-effect functions, where W is any random variable that is measurable with respect to $\sigma(X, Z_t)$. Hence, these equations do not only apply to $W = Z_{0t}$, but also to $W = X$. In this case, Eq. 8 of Table 7 yields the *X-conditional t-direct-effect function*

$$CDE_{xx',t}(X) = E\left[E^{X=x}(Y|Z_t)|X\right] - E\left[E^{X=x'}(Y|Z_t)|X\right], \quad (34)$$

where Z_t refers to a t-covariate of X. Correspondingly, Eq. 8 in Table 8 yields the *X-conditional total-effect function*

$$CTE_{xx'}(X) = E\left[E^{X=x}(Y|Z)|X\right] - E\left[E^{X=x'}(Y|Z)|X\right], \quad (35)$$

where Z denotes a covariate of X. If X is dichotomous with values 0 (control) and 1 (treatment), this function has two different values. The first value of the function

$$E\left[E^{X=1}(Y|Z)|X=1\right] - E\left[E^{X=0}(Y|Z)|X=1\right],$$

is often called the *average total effect on the treated* (cf., e.g., Geneletti & Dawid, 2011; Heckman & Robb, 1985; Morgan & Winship, 2007). It is the average total treatment effect in the subpopulation of the treated, given the mechanisms that actually assign persons to treatment condition $x = 1$. Correspondingly, the second value of this function,

$$E\left[E^{X=1}(Y|Z)|X=0\right] - E\left[E^{X=0}(Y|Z)|X=0\right],$$

is often called the *average total effect on the untreated*. It is the average total treatment effect in the subpopulation of the untreated, given the mechanisms that actually assign observational units to treatment condition $x = 0$. Also note that, if CC1 holds, then the X-conditional total-effect function $CTE_{xx'}(X)$ is constant and identical to the average total effect $ATE_{xx'}$.

Four Persons with Conditional Random Assignment: Continued

In Example 6, we already computed the difference $E^{X=x}(Y|Z) - E^{X=x'}(Y|Z)$ in order to compute the Z-conditional total-effect function $CTE_{xx'}(Z)$. The values of this total-effect function are $.50 - .50 = 0$ if $\omega \in \{Z=m\}$ and $.30 - .50 = -.20$ if $\omega \in \{Z=f\}$. Hence, using Eq. 4 of Table 8, we obtain

$$\begin{aligned} ATE_{xx'} &= E\left[E^{X=x}(Y|Z)\right] - E\left[E^{X=x'}(Y|Z)\right] \\ &= E\left[E^{X=x}(Y|Z) - E^{X=x'}(Y|Z)\right] \\ &= 0 \cdot .50 - .20 \cdot .50 = -.10. \end{aligned}$$

The same result is obtained using the definition of the average total effect. Also note that the expected values $E[E^{X=x}(Y|Z)]$ are the U-adjusted $(X = x)$-conditional expectations $E^{\bar{C}_X}(Y|X=x)$ (see Eq. 4 of Table 8).

Identification of Indirect Effects

Indirect effects can be identified by the differences between the total effects and the direct effects. Hence, let Z be a covariate of X and assume that the conditional expectations $E^{X=x}(Y|Z)$, $x \in \Omega'_X$ are $(C_{X,t}, Z_t)$-unbiased. Furthermore, let Z_t be a t-covariate of X, where $t_X < t < t_Y$, and assume that the conditional expectations $E^{X=x}(Y|Z_t)$, $x \in \Omega'_X$ are $(C_{X,t}, Z_t)$-unbiased. Then, the average t-indirect effect of x versus x' is identified by

$$\begin{aligned} E\left(\delta_{xx'} - \delta_{xx',t}\right) =& E\left[E^{X=x}(Y|Z) - E^{X=x'}(Y|Z)\right] \\ & - E\left[E^{X=x}(Y|Z_t) - E^{X=x'}(Y|Z_t)\right], \end{aligned}$$

provided that $\delta_{xx'} - \delta_{xx',t}$ is defined. Similarly, under the same assumptions: If Z_0 is a covariate of X and $\sigma(Z_0) \subset \sigma(Z) \subset \sigma(Z_t)$, then the Z_0-conditional indirect-effect function is identified by

$$\begin{aligned} E\left(\delta_{xx'} - \delta_{xx',t}|Z_0\right) =& E\left[E^{X=x}(Y|Z) - E^{X=x'}(Y|Z)|Z_0\right] \\ & - E\left[E^{X=x}(Y|Z_t) - E^{X=x'}(Y|Z_t)|Z_0\right]. \end{aligned}$$

provided that $\delta_{xx'} - \delta_{xx',t}$ is defined.

Summary and Conclusion

We presented the theory of total, direct, and indirect effects. This theory consists of two

parts. In the first part, these causal effects are defined; in the second, it is shown how they are identified by estimable quantities. In each part, there are two levels, a disaggregated and a reaggregated one.

In the *definition part* of the theory, the disaggregated level is called the atomic level. There we translated J. St. Mill's *ceteris paribus clause* into probabilistic concepts. The basic idea in the definition of an atomic total effect is to control (keep constant) all other variables that are prior or simultaneous to X and see how Y depends on X, ignoring all variables that are in between X and Y. In contrast, in the definition of an atomic t-direct effect, we control all other variables (potential confounders) that are prior or simultaneous to t, where t refers to a time point that is simultaneous or posterior to t_X, the time point at which X occurs for the first time, and prior to t_Y, the time point at which Y occurs for the first time. For $t = t_X$, direct and total effects are identical. At the second level of the definition part of the theory, we aggregate these atomic effects defining *average effects* as expectations and *conditional effects* as conditional expectations of the corresponding atomic effects.

In the *identification part* of the theory, we connect the causal effects to estimable quantities, namely, conditional expectations of Y given X, or of Y given X, covariates of X, and/or intermediate variables that are in between X and Y. At the disaggregated level of the identification part, we presented a number of causality conditions, i.e., conditions that imply identifiability of causal effects, some of which are empirically testable and others that are only of theoretical relevance. The unbiasedness and strong ignorability conditions are not empirically testable. However, they are implied by other causality conditions that are testable. The first kind of these causality conditions deals with independence or conditional independence of X and all potential confounders, the second with independence or conditional regressive independence of Y and all potential confounders. At the disaggregated level, we select covariates such that one of these causality conditions holds, where we condition on these covariates. Once, identification of conditional causal effects is achieved by controlling for these covariates, we can again reaggregate taking expectations and/or conditional expectations of those conditional causal effects obtained at the disaggregated level. In this way, we coarsen the conditional effects obtained at the disaggregated level of the identification part.

The theory presented has implications for the design and data analysis of empirical studies aimed at estimating and testing causal effects. The most important design techniques are randomization, conditional randomization, and covariate selection. All these design techniques aim at satisfying one of the causality conditions. Techniques of data analysis also can be selected guided by this theory. For example, we can specify conditions under which the analysis of change scores (between pretests and posttests) and repeated-measures analysis of variance yield causal effects. [It turns out that these conditions are usually met only in the randomized experiment (see Steyer et al., in preparation).] Similarly, we can specify the conditions under which we estimate and test causal effects in the analysis of covariance and its generalizations that allow for interaction between treatment and (possibly latent) covariates (see Steyer & Partchev, 2008). (These conditions are met in a conditionally randomized experiment and can be aimed at in covariate selection.) Finally, we can specify the conditions under which we estimate and test causal effects in analyses using propensity score methods. (Again, these conditions are met in a conditionally randomized experiment and can be aimed at in covariate selection.)

Let us conclude with a final remark. Aside from practical problems such as compliance and attrition of subjects, the (unconditionally) randomized experiment is the only design in which we can rely on traditional techniques of data analysis such as t-tests or analysis of variance. However, this applies only to the analysis of *total* treatment effects. All other effects – and this includes direct effects in a randomized experiment – require data analyses that are explicitly based on the theory of causal effects

(see Mayer et al., submitted). Contributing to improving the quality of life is worthwhile the additional efforts in applying the theory and techniques outlined in this entry.

Cross-References

- Analysis of Covariance (ANCOVA)
- Analysis of Variance
- Control Groups
- Design, an Overview
- Hypothesis Testing
- Latent Variable Path Models
- Latent Variables
- Linear Regression Model
- Longitudinal Structural Equation Modeling
- Measurement Error
- Mediation Analysis
- Mediator
- Multiple Regression
- Standard Deviation(s)
- Univariate Normal Distribution

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CAWP

▶ Chinese Aging Well Profile

CBA

▶ Cost-Benefit Analysis

CBI-17

▶ Bereavement Phenomenology Questionnaire

CBT

▶ Cognitive Behavior Therapy with Children

CCB

▶ Community Capacity Building

CDAI

▶ Crohn's Disease Activity Index

CDI

▶ Calibrated Development Index

CDR

▶ Clinical Dementia Rating Scale

CEA

▶ Cost-Effectiveness Analysis

Ceiling Effect

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Definition

The ceiling effect is said to occur when participants' scores cluster toward the high end (or best possible score) of the measure/instrument. The opposite is the floor effect.

Description

In some fields (biology, physiology, etc.), the ceiling effect refers to the point at which an independent variable no longer has an effect on a dependent variable, when a kind of saturation has been reached (e.g., the phenomenon in which a drug reaches its maximum effect, so that increasing the drug dosage does not increase its effectiveness) (Baker, 2004).

In statistics/psychometrics, the term ceiling effect is used to describe how subjects in a study have scores that are at or near the possible upper limit (Everitt, 2002), so that variance is not measured or estimated above a certain level (Cramer & Howitt, 2005). In the sphere of quality of life, this limit is usually not defined by the highest score, but by the highest degree of achievement of the measured concept. Therefore, the ceiling effect is evaluated as the proportion of subjects with the quality of life, and it may indicate that the items are not challenging enough for a group of individuals (i.e., a high proportion of variables displaying the ceiling effect may be interpreted as evidence of the instrument's inability to discriminate among high levels of health status).

When data hits the bottom end of the distribution range, the effect is called the "floor effect," which is precisely the opposite of the ceiling effect.

These effects may make distinguishing among subjects on the top/bottom end of the scale

impossible, and they represent a measurement problem when attempting to identify changes (i.e., they may not detect improvement after an intervention or reveal deterioration over time). For these reasons, both the ceiling and the floor effect should be examined as part of an instrument's validation process.

Antonym/opposite: Floor effect

Thresholds and Repercussions

When evaluating an instrument's psychometric characteristics, ceiling and floor effects are considered to be a problem if more than 15–20 % of respondents achieved either the best or worst possible score (McHorney & Tarlov, 1995). The higher these percentages are, the higher the likelihood of problems in relation to:

- Conceptual model and content validity: the presence of these effects may indicate that the scale lacks adequate range variability; extreme items (underlying dimension) may be missing from the upper or lower end, depending on whether the ceiling or floor effect is present.
- Reliability: which may be reduced if patients with the best (ceiling) or worst (floor) possible scores cannot be distinguished from one another (lack of variance).
- Responsiveness: improvement cannot be measured in patients in the ceiling cluster (Terwee et al., 2007) nor can deterioration be measured in those in the floor cluster.

Analytical Strategy

When data reveal pronounced ceiling effects, censoring may have occurred among individuals with a health status that lies above the threshold for perfect health (Vogt, 2005).

An elevated percentage of ceiling effect is commonly present when administering health status or quality of life instruments to the general population. To solve this analytical problem, which may lead to inaccurate predictions, the ceiling effect should not only be carefully evaluated, but it should also be thoroughly studied whenever present (http://www.medicine.mcgill.ca/strokengine-assess/definitions-en.html; Huang et al., 2008).

Several approaches to address these problems have recently been discussed, and OLS (ordinary least squares) models are being replaced by Tobit, CLAD (censored least absolute deviation), TPM (two-part), and LCM (latent class) models (Austin, 2002; Huang et al., 2008).

However, neither the ceiling nor the floor effect may be a problem in the IRT (item response theory) framework, because when using IRT scoring, one is free to specify the distribution of the latent trait (van den Berg, Glas, & Boomsma, 2007).

Cross-References

- ▶ Floor Effect
- ▶ Item Response Theory
- ▶ Tobit Models

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Celebrations

▶ Community Festivals

Cell Phone Well-Being

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Definition

Well-being assessment using cell phones: advantages and disadvantages.

Description

Assessing *well-being* is necessarily a difficult task because well-being, like all *moods*, are diffuse and unfocused affective states (Frijda, 1994) that are strongly influenced by the situations in which individuals find themselves in (Parkinson, 1996) and that change quickly. As such they may be subject to *recall biases*, in particular *"peak" and "recency" effects* (Kahneman, 1999). That is, individuals shift to *semantic memory* (i.e., beliefs about experiences) when making evaluations on larger time frames or trait judgments (Robinson & Clore, 2002). Retrospective reports may then capture only inaccurate estimations of immediate experiences. By using ecological momentary assessment (*EMA*; Stone & Litcher-Kelly, 2006) to collect reports of experiences or behavior as they momentarily occur and in the individuals' natural environment, however, researchers may minimize the potential for recall biases. Another advantage of EMA is that it can be used to obtain frequent measurements yielding insights into the well-being's *intraindividual variability*.

EMA has mostly been conducted using handheld computers. The benefits of using such electronic device are mainly the branching of questions depending on the participants' answers, the possibility of compliance checking, and the measurement of response latencies. However, there are some shortcomings of this electronic assessment tool, in particular the obligation to provide each participant with a device they are not proficient with.

Proliferation rates of mobile phones have risen steadily during the last 10 years. In 2010, European and American countries have more cell phones than inhabitants (http://www.itu.int/ITU-D/ict/material/FactsFigures2010.pdf), and the proportion of individuals having a cell phone is even higher among young people. Combined with a computer program that manages the calls, poses the preprogrammed questions, and stores the answers (given via phone keypad or voice), cell phone assessment seems a very promising advancement in EMA with unique advantages over other electronic devices:

- Familiarity with the device: Given the ubiquity of cell phones, participants are already familiar with cell phone technology.
- Time and cost efficiency: Relatively large samples can be studied simultaneously, whereas electronic device studies are constrained by the number of devices that can be bought and distributed for the participants to use.
- Location independence: There are fewer regional constraints of sample recruitment; participants do not have to live in the same city or even in the same country as the researcher (e.g., in cross-cultural studies, national surveys, twin pairs in behavior genetic studies).
- No data loss: The data are immediately recorded in a central computer.
- Ability to react to events: Modifications of the assessment instrument (e.g., additional or

changed items to react to historical events) are possible during the data collection phase without collecting and reprogramming the electronic devices themselves. Moreover, event-based assessment can be centrally controlled, which is especially advantageous when the time of the relevant event is unclear (e.g., political events, disasters).

- Participants do not have to carry around an extra device; they can use their own cell phone.

There are two risks to studying well-being with cell phones. First, because individuals are prompted several times and at moments when they could be busy, compliance (i.e., answers to each prompt) may be low. However, studies on compliance and comparability of pen-and-paper versus electronic devices data (Stone, Shiffman, Atienza, & Nebeling, 2007) show that compliance to the signals is high (75 % in Courvoisier, Eid, & Lischetzke, 2012). Second, *psychometric properties* of cell phone-collected data could vary because participants do not read the questionnaire but rather listen to it being read aloud. It could also differ because they may be busy when answering the questionnaire. Since people are used to answering their cell phones while doing other things at the same time, they may pay less attention to the questionnaire than would be the case with an unfamiliar device or with pen-and-paper. However, the psychometric properties (reliability, validity) of questionnaire scores collected with cell phone are similar to pen-and-paper scores (Courvoisier, Eid, Lischetzke, & Schreiber, 2010).

In conclusion, the collection of EMA data via cell phones opens up new promising possibilities for studying well-being.

Cross-References

▶ Ecological Momentary Assessment
▶ Well-Being

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Census

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Synonyms

Census of housing and population; National census; Population census

Definition

The modern census can be defined as an "official numbering of population or of a class of things, with various statistics. . ." (Sykes, 1982).

Description

Introduction

The census, as an instrument of enumerating people and property, has ancient roots. Civilizations dating back to the Babylonian era (circa 3800 BCE), the Chinese (circa 3000 BCE), the Egyptians (circa 2000 BCE), and the Hebrews (circa 1500 BCE) conducted censuses of their populations in order to determine the resources available to them for military purposes and to assess taxes.

A national census has often been compared to a detailed snapshot of a population taken at a given time. It is the most comprehensive enumeration of a society. Two major features of many national censuses, the coverage of the population and their regularity with respect to time (generally decennial, occasionally quinquennial), render their data extremely valuable for many forms of analyses. The fact that a national census is the most complete source of data on the demographic structure of a population makes it possible to analyze major demographic flows in the population as well as assessing the stock of a population.

The census has been and continues to be a major source of population data for most societies (see ▶ Canadian Research Data Centre Network). Its scope and impact as a statistical data collection instrument (as opposed to an administrative instrument) is unparalleled since, by design, it touches every person living in a given territory. The significance and impact of census results are equally far-reaching. Governments often make fundamental policy and program decisions affecting people's lives based in part or in whole on counts derived from the census.

Census Concepts

Census data and concepts can be compared to a mirror that reflects the values of the society at the time that the census is conducted. The content of the questionnaire, the wording of the questions, and the concepts that underlie the classifications used in the data tend to reflect the social and political values at the time the census is conducted (Goldmann and Delic, 2013).

In a census the population is either counted at its usual place of residence (the de jure method) or where it happens to be on the day the data are collected (the de facto method). While in its narrowest definition a census is a basic accounting of the demographic characteristics of a population (number, age, sex, where it lives, marital status), most modern censuses also include a broad range of questions dealing with socioeconomic and sociocultural characteristics of the population. The census is generally conducted by the respective national statistical agency (or its surrogate). In many states the mandate to conduct a census derives from legislation. For example, the mandate to conduct the census in Canada derives from the Constitution Act and from the Statistics Act. The mandate to conduct the Census in the United States derives from the US Constitution.

The methods employed to collect the data have evolved over time. They also vary by country. While automation and technology have become dominant in the processing of census data, collection is still carried out using enumerators in many countries. Some states, such as Canada, have ventured into the use of the Internet as a means for collecting the data. These ventures appear to be very successful and they are likely to keep down the costs of conducting a census. However, they are dependent on the extent to which the technology is available to the general population.

Key Issues

Frequency of the Census

The periodicity of a census is often tied to the legislation that defines the mandate under which it is collected. In general, it is safe to assume that most nations conduct a census on a decennial basis. Some countries, such as Canada and Australia, conduct a census every 5 years.

Alternative Sources of Data

There is a move towards the use of administrative records as an alternative source for census data. In this case, no direct contact is made with the respondents. Their information is derived from

the various administrative records held by the state (▶ General Social Survey).

Cost of Conducting a Census

While it is beyond the scope of this entry to provide a detailed analysis of the cost of conducting a national census, suffice it to say that it is a very expensive undertaking. National statistical agencies continuously explore methods to reduce the costs, including making changes in the way in which census data are collected and disseminated and in seeking alternatives to traditional census taking.

Politics of the Census

According to Kenneth Prewitt "Decisions about what to count are influenced by the dominant political ideologies, and numbers enter the political fray on behalf of social interests" (Prewitt, 1987, 261). We know that the census touches every individual living in a nation either directly or indirectly (through the use of proxy responses or administrative sources of data). It is the most complete statistical activity and the data derived from the census have a great impact on the population. Its visibility and coverage leave the census open to criticisms such as:

- The census is an unreasonable intrusion in the private lives of individuals. This observation was made most recently by senior politicians in the Canadian government with respect to the 2011 Census of Population. As a result, the detailed census was replaced by a sample survey and only an abridged census was conducted.
- The census represents an expression of state sovereignty over its population. This issue is of particularly concern for the First Nations peoples of Canada (see ▶ Aboriginal community well-being index).

Its status also lends legitimacy to the data that it collects. Groups in a population often want to have their specific issues covered in a census since they consider that this would officially sanction their position in society. For example, gay and lesbian groups have been lobbying very hard in Canada to have same sex marriages included in the census. Also, groups interested in pension rights for unwaged individuals have lobbied to have questions on unpaid work included in the census.

Recent events in Canada and other nations are likely to have a great influence on the nature of a census. The scope of the content of the census and the frequency of collection are being debated in the political arena. Some national governments, notably in Europe and parts of the Middle East, are advocating for the replacement of the traditional census with the development of the required information through the use of administrative records such as population registers. Others, such as Canada, have adopted the position that they will only collect a basic amount of demographic data using a conventional census and that additional information will be collected through a sample survey. It is important to note that often these decisions are being made at the political level rather than by representatives of the national statistical agencies.

Analytical Potential

Census data are prized for their coverage of small geographic areas and small/rare populations. It is possible with census data to perform analyses of the sociodemographic and economic conditions of subgroups in the population (e.g., the elderly, particular ethnic or racial minorities, young families, unattached youth) with a view to informing the development of public policies. It is also possible to perform analyses at the neighborhood level in cities to track change over time due to population aging, migration, and economic development.

Future Directions

Census data, or some equivalent source of information, will be required by national governments for the foreseeable future. At a minimum, these data will be necessary to establish subnational political boundaries (such as the delineation of electoral districts) and to determine the nature and effectiveness of services provided to the population. As noted earlier, alternatives to traditional census taking are being explored in Europe, North America, and the Middle East. The alternatives include the use of administrative records (such as population registers) and the use of rotating sample surveys in which the entire

population is enumerated over a 5- or 10-year period. It is clear that advances in technology are likely to influence future directions in census taking, based on current developments.

Cross-References

- ▶ Canadian Research Data Centre Network
- ▶ Data Liberation Initiative (DLI)
- ▶ General Social Survey: Canada
- ▶ General Social Survey (GSS): USA

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Census of Housing and Population

- ▶ Census

Center for Epidemiologic Studies Depression (CES-D) Scale

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Definition

The Center for Epidemiological Studies Depression Scale (CES-D) is a self-report measure of depressive symptomatology in the general population (Radloff, 1977).

Description

General Overview

Originally published in 1977 after several years of validation on community and inpatient samples, the 20-item CES-D is one of the five most widely used measures of depression, used in 4.37 % of basic science studies and 1.36 % of treatment outcome studies when a measure of depression was used (Santor, Gregus, & Welch, 2006). The CES-D is unique from other measures of depressive symptomatology in that it was designed for use in the epidemiological study of depressive symptomatology in the general population, rather than as a tool for diagnosing depression or evaluating the severity of depression across treatment (Radloff, 1977). Radloff emphasizes that this scale is not to be used as a diagnostic tool and that interpretations of individual scores should not be made. Rather, the scale should provide information of depressive symptomatology prevalence within the overall study population. The CES-D measures current levels of depression, asking respondents to answer based on their experience from the past week, and it emphasizes the affective component of depression (Radloff, 1977). Other frequently used measures of depression listed in order of their frequency of use in basic science and treatment outcome studies are Hamilton Rating Scale for Depression (HRSD), ▶ Beck Depression Inventory (BDI), Symptom Checklist (SCL-90-D), and Montgomery-Asberg Depression Rating Scale (MADRS; Santor et al., 2006).

A total scale score of 16 and above is used as a clinical cutoff to delineate cases of moderate depression (Radloff, 1977). The sensitivity of this cutoff score is high, even in psychiatric groups. For example, of diverse samples of patients with a mental disorder who were concurrently depressed, using the cutoff of 16 and higher correctly identified 99 % of currently acutely depressed inpatients, 93 % of people with Schizophrenia, 94 % of patients with alcohol dependence, and 74 % of patients with drug dependence (Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977). While some have

argued for a higher clinical cutoff point for greater sensitivity (e.g., 20 points and higher), the 16-point cutoff score provides optimal specificity in identifying clinical cases (Beekman et al., 1997). The CES-D shows superior scale discriminability to the Beck Depression Inventory, being better able to show differences in individuals across a continuum of depressive symptomatology, but may overestimate prevalence of depression when making categorical distinctions using the 16-point cutoff score (Santor, Zuroff, Ramsay, Cervantes, & Palacios, 1995).

Psychometrics

The 20-item CES-D consistently shows high internal consistency and good test-retest reliability, with reliability coefficient alphas of .85 for the general population and .90 for the inpatient, mentally ill population surveyed in the original publishing (Radloff, 1977). The CES-D was validated via examination of patterns of correlation with other measures of depression. Correlations of scores with ratings of severity made by nurse-clinicians were .56, with correlations improving from .69 to .75 after patients had received treatment (Radloff, 1977). Later research showed CES-D score means dropping significantly over time for patients receiving treatment, from a mean score of 31.91 at intake to 17.00 after 3 months of treatment (Husaini, Neff, Harrington, Hughes, & Stone, 1980). CES-D scores from the scale's original validation also showed high correlations with other measures of depressive symptomatology (Lubin, Bradburn Negative Affect, and Bradburn Balance) and general psychopathology (Langner), *r*s > .51 (Radloff, 1977). Discriminant validity was established by showing low correlations with age, gender, and socioeconomic status as well as being more closely correlated with the depression subscale on the SCL-90 as opposed to the other subscales (Weissman et al., 1977). The CES-D does, however, correlate with measures of self-esteem (r = .58), state anxiety (r = .44), and very highly with trait anxiety (r = .71), suggesting that it may capture a broader picture of psychological distress than simply depressive symptoms alone (Orme, Reis, & Herz, 1986).

The original manuscript also showed consistent reliability, validity, and factor structures across various demographic subsets of the populations surveyed: evaluating for age, race, geographic location, and gender (Radloff, 1977). Since then, many studies have shown the scale's validity and reliability as a depression measurement scale in other populations. In a population of women undergoing treatment for breast cancer compared to women with no history of cancer, the 20-item CES-D showed adequate test-retest reliability (test-retest reliability coefficients = 0.57 & 0.51 for the patient vs. healthy women, respectively), internal consistency (alpha coefficient = 0.89 & 0.87), and construct validity (correlations with POMS-F = 0.66 & 0.54, STAI-S = 0.77, & 0.65, SF-36 Mental Health Summary Scale = −0.65 & −0.67). While additional research is indicated for other cancer populations, this preliminary study showed the CES-D to be a useful and valid tool for use with cancer populations (Hann, Winter, & Jacobsen, 1999). In another study, the 16-point clinical cutoff score showed 100 % sensitivity and 88 % specificity using a 1-month prevalence rate of major depression in a community-based, representative sample of older adults aged 55–85 in the Netherlands. This study confirmed the CES-D's appropriate use with an elderly population (Beekman et al., 1997).

Scoring

The original CES-D as developed by Radloff in 1977 contains 20 items, four of which are reverse coded. Reverse-coded items (4, 8, 12, & 16) are written in the positive direction to both break response sets as well as measure presence or absence of positive affect. Directions ask respondents to consider their past week while answering questions on a 0–3 scale (0 = rarely or none of the time [less than 1 day], 1 = some or a little of the time [1–2 days], 2 = occasionally or a moderate amount of time [3–4 days], 3 = most or all of the time [5–7 days]). All items are summed (potential sum score ranges 0–60), and the sum score is used for the 16-point clinical cutoff. Original data reported for the healthy, adult

(aged 18 and older) participants produced means of 7.94–9.25 (*SD*s = 7.53–8.58; Radloff, 1977).

Theoretical Background

The original CES-D was developed through analysis of clinical literature and empirical studies that employed factor analysis to identify the major components of depressive symptomatology and borrowed items from other previously validated scales measuring depression. Factor analysis with the original CES-D development data reveals four factors: depressed affect, positive affect, somatic and retarded activity, and interpersonal. However, due to high correlations among the four factors, one overall score best represents the data (Radloff, 1977).

There has been some controversy over whether the four reverse-coded, positive affect items fit within the single factor of depression which the scale has been proposed to show, or whether the scale actually measures two independent factors of positive and negative affect. A study using covariance structural equation modeling, however, found that any differential responding to positive and negative items results from testing artifact, rather than from meaningful differences in factors. This suggests that the CES-D does indeed measure depression on a single-factor continuum from happiness to depression as originally proposed (Wood, Taylor, & Joseph, 2010).

Shortened Forms

The average time to complete the original 20-item CES-D is approximately 5 min (Carpenter et al., 1998), but for older or ill adults, this time typically lengthens to an average of 7 min. For the oldest and frailest respondents, completion time can range upward from 10 to 12 min (Kohout, Berkman, Evans, & Cornoni-Huntley, 1993). As such, many shortened CES-D forms have been created to decrease the burden on respondents, especially in studies with primarily older or ill participants. Three popular shortened 10-item versions described below are selected based on their published psychometrics and factor analysis showing their equivalency to the original 20-item CES-D.

The Rasch-derived CES-D 10-item form was designed to maintain the theoretical saliency of the test and boasts true interval scoring as well as preservation of accuracy in detecting a range of severity in depressive symptomatology. This scale uses original items 1, 3, 4, 5, 7, 8, 9, 10, 14, and 15 and uses the same 0–3 scale and past week time frame used in the original CES-D. Confirmatory factor analysis shows that this shortened version follows the same four-factor pattern of the original version, as well as indicating use of a single-factor sum score of depressive symptomatology. Internal consistency was comparable to that of the original version, with the coefficient alpha = .82 (Cole, Rabin, Smith, & Kaufman, 2004).

Another 10-item CES-D was developed by Andresen and colleagues (1994) particularly for use with older participants, validated on a sample of 1,206 adults aging 65–98 (mean age 72.8). This scale selected items from the original 20-item version that showed the highest predictive power to the overall CES-D score, resulting in a scale using items 1, 5, 6, 7, 8, 10, 11, 12, 14, and 20. Response options remain the same as the original scale (0–3), with a score range from 0 to 30, and the validation sample showed a mean score of 4.7. For this scale, a cutoff score of 10 and over showed the best predictive accuracy compared to the 20-item version ($\kappa = .97$, $p < .001$). The scale proved to be both reliable (test-retest after 1 month $r = .71$) as well as stable (test-retest after 1 year $r = .59$). Scores showed expected correlations with other measures, with depressive symptoms increasing with poorer health status ($r = .37$) and being strongly inversely related to positive affect ($r = -.63$). For this version, a minimum of nine items completed is required to score the measure, with the average item score added in lieu of the tenth score (Andresen, Malmgren, Carter, & Patrick, 1994).

Kohout, Berkma, Evans, and Cornoni-Huntley published two brief versions of the CES-D in 1993. The first was termed the Iowa 11 × 3, using 11 items from the original scale (2, 6, 7, 11, 12, 14, 15, 16, 18, 19, & 20) and condensing

the response options to a 0–2 scale (0 = hardly ever or never, 1 = some of the time, 2 = much of the time). This version showed internal consistency ($\alpha = .81$) comparable to that of the original ($\alpha = .86$). The second form was termed the Boston 10 × 2, using only 10 items from the original scale (6, 7, 11, 12, 14, 15, 16, 18, 19, & 20), while collapsing the response options into a two-option scale (0 = [no descriptive name], 1 = much or most of the time). While lower than that of the original form, the internal consistency of the Boston form was adequate ($\alpha = .73$). Both versions closely correlated with scores from the original CES-D ($rs > .83$; Kohout et al., 1993). However, with diverse adult samples, correlations with original CES-D and internal consistencies were invariably higher on the Iowa form across almost all test groups, with authors recommending use of the Iowa 11 × 3 form over that of the Boston 10 × 2 form (Carpenter et al., 1998).

Additional psychometrics data for the Iowa 11 × 3 and Boston 10 × 2 forms were published by Carpenter and colleagues (1998). Test samples included women with breast cancer, women with benign breast disease, healthy comparison females, female students, low-income mothers, and mothers of young children. The authors also list regression formulas to predict the full CES-D 20-item score to compare to original version means and standard deviations as well as to the 16-point clinical cutoff (Carpenter et al., 1998).

Cross-References

► Beck Depression Inventory

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Central and Eastern Eurobarometer (CEEB)

► Eurobarometer

Central Nervous System (CNS) Tumors

► Childhood Cancer

Central Tendency

► Mode, Central Tendency of Distribution

Central Tendency Measures

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Definition

Measures of central tendency identify the average situation in a data set; they are associated with measures of variation.

Each level of measurement has an associated index of central tendency relevant to that type of data.

1. With nominal/categorical data, where individuals are placed in categories, the average is the *mode*; it identifies the most common category.

   For example, if 13 pupils in a school class are from Croatia, 10 are from Serbia, 4 from Bosnia, and 3 from Montenegro, the modal category is Croatian. If one pupil is selected from the classroom at random, she is more likely to be a Croatian than a member of any other group.
2. With ordinal data, in which individuals or categories (groups of individuals) are placed in a rank order, the relevant central tendency measure is the *median* – the individual or category which divides the population into two equal halves.

   For example, the judges in a piano-playing competition, in which there are five contestants, A, B, E, H, and K, place them in order – from the best to the worst – E, B, K, H, and A. The median individual is then K. Two (E and B) are better than the average that K represents, and the other two (H and A) are worse than average.
3. With interval data, in which individuals have a numerical value on a continuous scale, the relevant measure of the average is the *arithmetic mean*.

   If, for example, five candidates in an exam are given marks of 4, 5, 8, 8, and 10, the mean is calculated as the sum of all of the marks (i.e., 35) divided by the number of individuals (5) – giving an average mark of 7. Anybody with a mark above 7 has performed better than average; somebody with a mark below 7 has performed less well than the average candidate.

   If the values on the interval scale are symmetrical (what statisticians refer to having a normal distribution), then the mean value will be similar to, if not the same as, the median. For example, if the five marks obtained are 4, 5, 6, 7, and 8, then the median and the mean are both 6: [{(4 + 5 + 6 + 7 + 8)/5} = (30/5) = 6]. If, however, they are asymmetrical, this is not the case: With marks of 4, 5, 6, 10 and 15, the median again is 6 but the mean is 8 [{(4 + 5 + 6 + 10 + 15)/5} = (40/5) = 8)]. The higher value of the mean relative to the median is because there is a small number of much larger marks (i.e., the distribution of marks is skewed – more elongated – on one side of the mean than the other).
4. For *ratio* data, such as proportions and percentages, arithmetic means can also be deployed as the average measure. Other means, such as the *geometric mean* and the *harmonic mean*, are particularly valuable where the data have a non-normal distribution.

For example, you may want to calculate the average speed of a train journey of 100 miles divided into two parts. In the first, the train travels 50 miles in half-an-hour, at a speed of 100 mph; in the second, the 50 miles are completed in 20 min, at a speed of 150 mph. What is the average speed? The arithmetic mean suggests that it is 125 mph, but the *harmonic mean* (obtained as twice the product of the two speeds, divided by their sum – i.e., $[\{2 \times (100 \times 150)\}/(100 + 150)] = (30{,}000/250)$) puts it at 120 mph. (The arithmetic mean gives equal weight to the two sections.)

A further measure used for ratio data is the *geometric mean*, as in studies of growth rates. For example, the value of a portfolio of stocks may be \$100 at the time of investment, \$180 after 1 year, \$200 after two, and \$300 after three. The growth rates were thus 80 % in the first year, 11.11 % in the second, and 50 % in the third. The arithmetic mean for those 3 years would be $[(80 + 11.11 + 50)/3] = 47.04$ % – but if the investment increased by that ratio for each of the 3 years, that would give a final value of \$317.90 and not \$300. The geometric mean – calculated as the nth root of the product of the n = three ratios (i.e., the cube root of $(1.80 \times 1.1111 \times 1.5)$) – is 1.4422, which gives the correct final outcome.

Use of average as an indicator of central tendency is thus a collective term; a different type of average applies to different types of data according to their level of measurement. At any level of measurement, it is feasible to apply a measure of central tendency associated with a lower level, but not a higher one. Thus, the median value can be calculated for interval and ratio data – identifying the point in a distribution that divides it into two halves – but the arithmetic mean cannot be calculated for ordinal data.

Although it is usual to use the relevant measure of central tendency for a data set – the mean for interval and ratio data, for example – this may not always be the best approach. If the distribution of values is normal, or approximately so (i.e., symmetrical and bell-shaped), as with measures of general intelligence, then the mean gives a clear indication of the average. If, however, the distribution is very skewed, as with that for wages – many more people are poorly paid than are highly paid- then the mean may not give a very good indication of the average situation because the small number of large values will "inflate" the average. In such situations, the median provides a better indication of how much the average person earns: It will be smaller than the mean because it is not influenced by the small number of high values when it splits the population/sample into two equal halves.

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Cerebrovascular Disease

▶ Cerebrovascular Disorders

Cerebrovascular Disorders

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Synonyms

Cerebrovascular disease; Stroke

Definition

Cerebrovascular disorders are generic terms to refer to any dysfunctions of the central nervous system due to the interruption of normal blood supply to the brain.

Description

Cerebrovascular disorders have profound implications for public health, mainly because of their high incidence, prevalence, and high rates of remaining morbidity (Chong & Sacco, 2005; Lalux, Lamonnier, & Jamart, 2010; Leoo, Lindgren, & Petersson, 2008). The decreases in mortality and increases in life expectancy observed over the last decades emerged in the increase of people with motor and cognitive deficits (Chong & Sacco, 2005).

About two thirds of cerebrovascular disorders result in mortality in developing countries (Cavalcante, Moreira, de Araujo, & Lopes, 2010; Saposnik & Del Brutto, 2003). This health condition is the major cause of chronic disabilities, both in developed and developing countries, where it is targeted as a major health problem. It is estimated that an average of 500,000 new episodes will occur each year in the United States (Lavados et al., 2007).

The sequelae of cerebrovascular disorders involve some degree of dependency, especially during the first year after the occurrence of the episode, with approximately 30–40 % of survivors being unable to return to work and some individuals requiring some assistance to perform their basic daily activities (Teixeira-Salmela, Nadeau, Mcbride, & Olney, 2001). The motor control of these individuals may be hampered not only by muscular weaknesses but also by sensory deficits, loss of protective reactions, presence of spasticity, and loss of balance and control of movements (Bohannon, 1988; Davidson, 2000).

There are many risk factors for the development of cerebrovascular disorders. Some are preventable and the patients' education is essential. These risk factors are summarized below (Lalux et al., 2010; Leoo et al., 2008; World Health Organization, 1993):

History of cardiovascular diseases

- Intermittent claudication
- Carotid surgery
- Ischemic heart diseases

Current risk factors

- Cardiac victims
- Mechanical heart valves
- Hyperlipidemia
- Carotid artery stenosis
- Hypertension
- Angina pectoris
- Diabetes mellitus
- Cardiac failure
- Smoking
- Obesity
- High alcohol consumption
- Oral contraceptive use

According to the American Stroke Association, there are recognizable warning signs of a cerebrovascular disease, such as (World Health Organization, 1993):

- Sudden numbness or weakness of the face, arm, or leg, especially on one side of the body
- Sudden confusion, and trouble in speaking or understanding
- Sudden trouble in walking, dizziness, and loss of balance or coordination
- Severe headache with no known causes

To prevent recurrent stroke events, the gold standard strategy targets for the reduction of risk factors, which encompass metabolic disorders, atheroscleroses, and heart diseases (Lalux et al., 2010). Cerebrovascular disorder prevention needs to be increased by better implementations of strategies in clinical practice (Polese et al., 2012). Individuals and their families also need to be better informed regarding the target values, as well as regarding the importance of regular physical activity and the cessation of drinking and smoking (Leoo et al., 2008).

The first aim for the treatment of cerebrovascular disorders is the prevention through risk factor reduction and their recurrence by modifying the underlying pathological processes. Multidisciplinary teamwork is necessary to contemplate for all patients' needs (Lavados et al., 2007). The teamwork includes physical, occupational, and speech therapists, neuropsychologists, social workers, and nurses (Davidson, 2000). The patients' families play essential roles in the process of reintegration of their daily life activities and the environmental needs to be adapted to the

individuals' new physical and emotional conditions (Polese et al., 2011).

The treatment in the acute phase is focused on the primary deficiencies, such as prevention of contractures, disuse atrophy, and respiratory problems (Leoo et al., 2008). In the chronic phase, the interventions are focused on cardiorespiratory and muscular fitness to help individuals to adapt to their new reality, regaining their social lives, and consequently improve their quality of life (Davidson, 2000).

Cross-References

- ▶ Diabetes Mellitus Type 1
- ▶ Disability
- ▶ Morbidity Measures
- ▶ Mortality
- ▶ Physical Activity
- ▶ Public Health

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CGIQLI

- ▶ Symptomatic Gallstone Disease and Quality of Life in Taiwan

Challenging Behavior

- ▶ Behavioral Dysfunction

Chance Encounters and QoI

- ▶ Casual Sex and the Quality of Life

Change, Sustainable

- ▶ Long-Term Changes in Well-Being

Changes in Health Status

▶ Health Status Measurement

Changes in Quality of Life

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Synonyms

Minimal detectable changes (MDC); Minimal important changes (MIC); Outcome assessment, quality of life; Response shift

Definition

Clinically important differences may differ across groups of patients, according to diseases, conditions, levels of severity, socioeconomic status, nationality, and cultural contexts. Changes in quality of life (QoL) may be detected by minimally important differences, which means "the smallest differences in scores in the domain of interest, which patients perceive as beneficial and which would mandate, in the absence of troublesome side-effects and excessive costs, changes in patients' management" (Jaeschke, Singer, & Guyatt, 1989).

It is important to make a distinction between changes and differences. Changes are defined in a longitudinal manner, where changes in health status are considered within a patient or group of patients over time. In contrast, differences are cross-sectionally defined as those between patients or groups of patients (de Vet & Terwee, 2010). Thus, minimally important changes (MIC) and minimally detectable changes (MDC) are clearly generated by different concepts. The term MID refers to the smallest changes in the scores in the construct to be measured, which are perceived as important by patients, clinicians, or relevant others, whereas MDC refers to the smallest detectable changes by the instrument beyond measurement errors (Swartz et al., 2011; Turner et al., 2010).

Description

Patient-reported outcome (PRO) and health-related quality of life (HRQoL) assessments may benefit patients, clinicians, researchers, administrators, public and private health organizations, and policy makers. Furthermore, many randomized controlled trials now include PRO and HRQoL measures as valid and useful endpoints in addition to traditional clinical outcomes, which assess mortality and morbidity (Crosby, Kolotkin, & Williams, 2003; Wyrwich, Norquist, Lenderking, & Acaster, 2012). However, the assessment of changes remains a challenge for each type of measurement. The interpretation of changes has been a concern of many researchers. Recently, researchers have focused their efforts on methods to identify a minimal level of change, which is more consistent with patients' preferences in the real world than to determine the statistically significant score differences to establish benefits of interventions (Norman, Sloan, & Wyrwich, 2003).

Determination of the minimal level of real changes for any measure or questionnaire can be such a hard task because there are many confounding elements that may influence the results, such as different diseases and age groups; the relative positions of the individual on these scales, such as floor and ceiling effects; the number of items to be responded on the scale, and the number of levels of response for each individual item. However, there is some evidence that some of these various factors may have relatively small impacts on the magnitude of the minimal differences (Norman et al., 2003).

It has been proposed that with QoL endpoints being used in clinical trials, when patients have chronic illnesses and require palliative care, treatments are expected to be equivalent in efficacy, but one offers HRQoL benefits; a new treatment may show a small benefit that is offset by QoL

deterioration, or treatments differ in terms of short-term efficacy, but the overall failure rate is high (Crosby, Kolotkin, & Williams, 2003).

Conceptualizing and Operationalizing Changes

Once PRO and HRQoL measures with established and acceptable measurement properties have demonstrated statistically significant changes, in consequence, the establishment benchmarks for the interpretation of results is necessary (Wyrwich et al., 2012).

Biological, physiological, and structural aspects of the disease symptoms, measured by experienced professionals, provide a straightforward measure of change across measurements, which may permit rapid and direct analyses of important and meaningful interpretations of clinical results. But, the great possibility of numerous available HRQoL instruments assessing different facets of health perceptions or dimensions of physical, emotional, social, and spiritual aspects makes the identification of what or to whom a change is important, and to what magnitude that change has occurred is also a great challenge. Furthermore, clinically important differences may differ across groups of patients according to diseases, conditions, levels of severity, socioeconomic status, nationality, and cultural contexts. Changes in QoL may be detected by the minimally important differences, which means "the smallest differences in score in the domain of interest, which patients perceive as beneficial and which would mandate, in the absence of troublesome side-effects and excessive cost, changes in the patients' management" (Jaeschke et al., 1989).

Approaches to Estimate Changes

Changes in PRO and HRQoL scores are difficult to interpret due to the multicomponent complexity of the construct of QoL (Swartz et al., 2011; de Vet & Terwee, 2010).

The construct of meaningful changes in QoL continues to evolve over time. Many reports which described measurement of the minimal clinically important difference (MCID) have been presented. Because the QoL construct is so complex, many denominations have been raised such as minimally clinically important differences, minimally important differences, minimally worthwhile reductions, or MIC. Although it is not clear what construct these measurements are intended to measure, the key of interest is to identify the "clinically or meaningful important" effects of interventions, suggesting that these estimates could be used for sample size calculations or to interpret the findings of clinical trials (Ferreira & Herbert, 2008; Ferreira et al., 2012).

Barrett, Brown, Mundt and Brown (2005) suggested two conditions to estimate the clinical significance of an intervention: (a) decisions about what constitutes a worthwhile effect must involve weighing the benefits of the intervention based upon its costs, risks, and inconvenience; thus, the smallest worthwhile effects should be intervention specific. Consequently, the smallest worthwhile effect is not a property of the outcome measure; (b) judgments about whether the benefits of intervention outweigh the costs, risks, and inconvenience should be based upon the perspective of patients submitted to the intervention. They stressed that it is not reasonable to claim that the effects of a given intervention are worthwhile, unless the patients have judged so.

There are several proposed methods to determine MIC. The most common approach is to express the differences as effect sizes, which are the average changes divided by the baseline standard deviation (SD), which are classified as small (0.2), medium (0.5), and large (0.8) effect sizes. This approach allows for the decision of whether a change is important or unimportant, including the assertion that a moderate effect size of half of an SD was typically important (Geoffrey, Sloan, & Wyrwich, 2003). Another used approach is the value of one standard error of measurement (SEM) (Swartz et al., 2011; de Vet & Terwee, 2010).

The most common are the distribution-based and anchor-based methods. Comparisons of these methods have led to insights into essential differences between these approaches. The anchor-based method examines the relationships between PRO or HRQoL measures and an independent criterion (or anchor) to elucidate the meaning of a particular degree of change. Anchor-based approach uses an estimate of the

MID, defined as the smallest difference in scores at the endpoint of interest, which patients perceive as beneficial without side effects and high financial costs. This method allows the stratification between the differences in groups of patients, who have improved, remained the same, or worsened over some period of time and, thus, establish a threshold based upon the changes in PRO or HRQoL in patients who report minimal changes, either for better or worse (Geoffrey et al., 2003).

There have been research efforts to determine a uniform measure for MIC, such as 0.5 SD and one SEM, and also on the diversity of MIC values, depending upon the types of anchors, the definition of the minimal importance on the anchor, and the characteristics of the disease under study (de Vet & Terwee, 2010).

Other commonly used approach is the distribution or *the population based*, which identifies subpopulations with minimally different levels of health and, then, looks at the differences in scores on a PRO or HRQoL measure. Although these differences have external validity in terms of population differences, the links to clinical significance, or to any estimation of minimal differences at the individual level, are still unclear (Geoffrey et al., 2003).

Some distribution-based methods have been merely focused on MDC. For assessing MIC, anchor-based methods are preferred, as they include a definition of what is minimally important. Acknowledging the distinctions between minimally detectable and MIC is useful, not only to avoid confusion among the MIC methods but also to gain information on two important benchmarks of the scale as a health status measurement instrument. By appreciating these distinctions, it is possible to judge whether the MDC of a measurement instrument is sufficiently small to detect MIC (de Vet & Terwee, 2010; Geoffrey et al., 2003).

The benefit-harm trade-off method was suggested by Barrett et al. (2005), which was defined as the benefits that potential recipients of treatment would consider sufficient to justify the costs, risks, and inconveniences. The benefit-harm trade-off method first involves present respondents with summaries of benefits and harms associated with a particular intervention. Respondents are asked to comment on whether or not they would choose the intervention. Then, holding everything else constant, the respondent is asked to imagine if the benefits of the intervention are larger or smaller. This process is repeated until it is possible to identify, with sufficient precision, the threshold benefit for which the respondent would choose to have the intervention.

De Vet et al. (2007) proposed a visual method, called the anchor-based MIC distribution method, which is an integration of both approaches. They used an anchor, and patients were categorized as persons with important improvements, significant deteriorations, or without significant changes. For these three groups, the distributions of the change scores on the health status instrument were plotted on a graph, which allowed to find two cut-off points for an MIC presented in an ROC curve with 95 % confidence intervals. The anchor-based MIC distribution method provides a general framework, applicable to all kind of anchors.

According to Ferreira et al. (2012), who conducted a systematic review on methods used to estimate the smallest worthwhile effect of interventions, judgments about whether the effects of an intervention are large enough to be clinically worthwhile should be decided by the patients, not by the clinicians or researchers. If an estimation of the smallest worthwhile effect is to be used to inform the design and interpretation of clinical trials, it should be expressed in terms of an effect, rather than an outcome. The effects of an intervention on an individual are the differences in outcomes, which would occur with and without intervention, so that the effects of an intervention could be the differences in the outcomes, which would occur with two competing interventions.

The systematic review conducted by Ferreira et al. (2012) indicated that the most commonly used anchor-based and distribution-based methods are based upon the opinions of the researchers, do not account for the risks and costs of treatment, and rarely define the effects of the interventions, in terms of the differences in outcome with and without interventions. Consequently, after analyzing all the available methods used by various researchers, they recommended

the use of the benefit-harm trade-off method to determine the smallest worthwhile effects because this method directly assesses the magnitude of the effects which patients consider to justify the costs, risks, and inconveniences of the interventions. It is possible to use the benefit-harm trade-off method in a way to generate estimations expressed in terms of effects, rather than in terms of the outcomes of the interventions. This method can be relatively easily applied, and therefore, it could be routinely used before randomized trials to obtain estimations of the smallest worthwhile effects of interventions.

Confounding Factors Affecting Interpretation of Changes

There are threats to the measurement of true changes. Swartz et al. (2011) suggested that there are three possible threats relevant to longitudinal PRO or HRQoL data: (a) response shifts – individuals employ subjectivity to appraise QoL and other PRO variables. Those measures have no external validations and are possible without subjective appraisal. An individual's criteria for these subjective constructs can change during a course of illness and treatment. Such response shift phenomena are inherent to health outcome research, showing that individuals who experience health-state changes often modify their internal standards, values, and conceptualization of the target constructs in an iterative process of adaptation; (b) instruments with varying sensitivity across the trait of interest – mostly PRO or HRQoL instruments tend to be adequately sensitive for only subsets of the range of the construct.

Although not a complete solution, rigorous item response theory (IRT) analyses could facilitate assessing the varying sensitivity of the instrument to identify the instruments most sensitive to the changes of interest in a particular study; (c) non-ignorable missing data – missing data is a challenge when assessing changes in PRO or HRQoL scores, which often are due to unobserved outcomes, e.g., subjects' QoL has dramatically declined, and they stopped reporting their data. The problem of missing data is to establish an appropriate statistic model to analyze the changes, considering the unobserved data.

Yet, Barrett et al. (2005) pointed out that there are two pitfalls, which need to be avoided when interpreting RCT results, related to analyses of changes: (a) a large trial can detect statistically significant treatment effects that are so small to be clinically insignificant. This can lead to false-positive interpretations of the results; (b) a small trial can fail to detect clinically significant treatment effects. This can lead to false-negative interpretations.

Conclusions

The precise effects of intervention on an individual are usually known. In randomized trials, it is possible to estimate the mean effects of intervention because the differences in the mean outcomes of the intervention and the control groups are equal to the mean effects of the intervention. However, treatment outcomes or changes in outcomes, which happen over the course of treatment, do not provide a satisfactory measure of the effects of the intervention, because they might be influenced by the intervention, natural recovery, statistical regression, and placebo effects. Thus, the estimation of the smallest worthwhile effects of intervention should be analyzed in terms of the hypothetical differences in outcomes with and without interventions, rather than in terms of outcomes or changes over the course of the treatment.

There are numerous approaches to estimate the smallest worthwhile effects of an intervention. It is important to make a distinction between changes and differences. Changes are defined in a longitudinal manner, whereas differences are cross-sectionally defined. There are several approaches used to estimate the smallest worthwhile effects of intervention, such as the effect size (half a SD), the distribution and anchor-based methods, and the benefits of harm trade-off and visual methods, called the anchor-based MIC distribution method. Whatever methods are used to estimate the smallest worthwhile effect of interventions, judgments about whether the effect of an intervention is large enough to be clinically

worthwhile must be made by the patients, not by the clinicians or researchers. If an estimate of the smallest worthwhile effect is to be used to inform the design and interpretation of clinical trials, it must be expressed in terms of effects rather than outcomes.

Cross-References

► Effect Size

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Character Strengths

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Synonyms

Strengths of character; Values; VIA classification; Virtues

Definition

According to Peterson and Seligman (2004), character strengths are ubiquitous traits which are valued in their own right and not necessarily tied to tangible outcomes. Character strengths do not diminish others; rather, they elevate those who witness the strength expression, producing admiration not jealousy.

Description

Human beings have the unique ability to think about themselves: Who are we? We can recall our past and make predictions about our future. Our ability to think about ourselves, about our past, and about the future, however, is marked by negativity. We are hardwired to focus on weaknesses than on strengths, and we are more risk aversive than gain sensitive (Kahneman & Tversky, 1984). Evolution has made most of us more

adept at worrying than at appreciating. When we encounter challenges, we are more likely to recall shortcomings, failures, and setbacks – our own and those of others – and if we do this persistently, we develop psychological distress. Riding on this default wave of negativity, psychology has enumerated far more than two hundred different varieties of psychological distress and numerous efficacious therapies to remediate this distress. Nonetheless, it has also largely made psychology a remedial or correctional discipline. Until recently, there was not a single coherent system which could reliably classify, define, and measure characteristics and conditions which make life worth living.

In the past decade, positive psychology has made concerted empirical efforts to advance the science behind what is strongest and best in people. Most prominent in these efforts is the field of character strengths. Whereas symptoms, in their varying combinations and severity, help us to understand nuanced levels of stress, sadness, and anxiety, character strengths help us to understand ways one can experience flourishing, positive relationships, engagement, meaning, and well-being. Character strengths are capacities of thinking, feeling, willing and behaving. They are the basic psychological ingredients that enable us to act in ways that contribute to our well-being. Fearing that character strengths carry prescriptive and value-laden tone, psychology relegated them to philosophy and made the troubled aspects of human life the focus of its empirical investigation. Christopher Peterson and Martin Seligman (2004) spearheaded the first systematic effort to classify core human strengths, acknowledging that character strengths are morally desired traits of human existence, but at the same time, they present them as descriptive traits open to empirical examination. Much like psychology has shown that individuals who experience negative emotions such as anger, hostility, vengeance, or narcissistic traits are more likely to develop a host of psychological ills, individuals who experience ▶ gratitude, forgiveness, humility, love, and kindness are more likely to report being happier and satisfied with life. Hence, character strengths describe various shades and dimensions of human flourishing and well-being.

According to Peterson and Seligman (2004), character strengths are ubiquitous traits which are valued in their own right and not necessarily tied to tangible outcomes. Character strengths do not diminish others; rather, they elevate those who witness the strength expression, producing admiration not jealousy. Some individuals strikingly embody strength, while others may have what appears to be no perceivable level of a given strength. Societal institutions, through rituals, attempt to cultivate character strengths.

Peterson (2006) distinguishes character strengths (e.g., kindness, teamwork, zest) from talents and abilities. Athletic prowess, photographic memory, perfect pitch, fine dexterity, physical agility, and such constitute talents and abilities. Character strengths have moral flavor, whereas talents and abilities do not. Also, talents, by and large, are not buildable. Clearly, self-regulation and optimism can improve one's swimming performance, but these increments tend to be relatively small. To swim like Michael Phelps and run like Usain Bolt, one needs certain physical abilities. Character strengths can be built on even frail foundations and, with enough practice, persistence, and good mentoring, can take root to make life worth living. Also, one can squander a talent, but a character strength is usually not squandered.

The field of psychology has placed a predominant emphasis on weaknesses which has led mental health professionals and consumers to think of psychological disorders primarily as the presence of symptoms. Taking a similar categorical approach, disorders can also be conceptualized as an overuse and/or underuse of multiple character strengths. However, we believe a dimensional approach makes more sense in attempting to understand the complexities of the character strength-psychopathology relationship. Such a dimensional approach would view strengths in terms of their overuse and underuse, and their expression would exist in degrees. Character strength use varies by context so there is no perfect mean other than to reflect what Aristotle (2000) expressed as the golden mean of the expression of

the right combination of strengths to the right degree in the right situation (Schwartz & Sharpe, 2006). From this angle, depression might be viewed as an underuse of the character strengths of hope/optimism, humor/playfulness, and zest; simultaneously, it may often be characterized as the overuse of the character strengths of judgment/critical thinking as well as of perseverance as reflected in thought rumination. Likewise, anxiety nearly always has an element involving the underuse of bravery/courage, and the narrowing of attention reflects an underuse of the character strength of perspective.

Knowing and using something positive that one already has increase one's self-efficacy to deal with challenges confidently and adaptively. What follows are some arguments for why character strengths are important, particularly in therapy, counseling, coaching, and teaching. While there is emerging research to support these points, further research is necessary before final conclusions can be drawn.

- *Repairing or Fixing Weakness Does Not Necessarily Make You Stronger*: The assumption that fixing all weaknesses will make us happy or happier is a misconception. In writing or editing a paper, one may correct all spelling and grammatical errors, but this does not necessarily make the paper excellent in quality. Writing an excellent paper entails expressing creative craftsmanship.
- *Using Strengths Helps to Reinterpret and Reframe Problems Adaptively*: Using strengths increases one's self-efficacy, and confidence in ways focusing on weakness cannot. Because being aware of our character strengths, in addition to weaknesses, facilitates us to reinterpret and reframe problems from a strength's perspective rather than from a weakness perspective.
- *Fixing Weakness Does Not Necessarily Cultivate Happiness*: A popular working principle many practitioners take is that fixing weaknesses is of utmost importance for happiness and strengths will simply take care of themselves. A paralleled conception is that working on something one is already good at is wasting time and energy which could better be spent on correcting weaknesses. Much like weaknesses require fixing, strengths require nurturance. Fixing weakness yields remediation, while strength nurturance produces growth and, most likely, greater happiness.
- *Be Wary of Trite Proclamations*: There are many popular statements that are more likely to be misconceptions than conventional wisdom, e.g., "you can do anything, if you work hard at it" and "the sky is the limit." Instead of chanting these mantras, consider using your character strengths. A strength-based approach helps frame specific, practical yet realistic goals geared toward alleviation of depression and create enduring ▶ life satisfaction.
- *Strength Awareness Builds a Cumulative Advantage*: Evidence shows that people who are aware of their strengths are able to build self-confidence at a young age and tend to reap a "cumulative advantage" that continue to grow over a lifetime (Judge & Hurst, 2008). This is not dissimilar to Fredrickson's (2001) broaden-and-build theory of positive emotions; however, applied-to-character strengths would state that strengths broaden a repertoire of action potentials in the present and build resources in the future.
- *Using Strengths to Promote Resilience*. Adversities, traumas, and losses undermine physical and emotional health and pose a significant risk for thwarting growth. These challenges can strike anytime and are often unexpected. Knowing and using strengths, in good times, help you to learn strategies which you can use in turn during tough times. Being aware of and using strengths not only promote resilience but also prepare individuals to encounter challenges adaptively.
- *Using of Strengths to Find Balance in Daily Interactions and Manage Relational Challenges*. If daily interactions between two partners, friends, or colleagues focused more on each other's weakness and deficits, then unease, tension, and resentment are likely going to mark these interactions. A balanced approach is going to address conflict as well as cooperation, grudge as well as gratitude, hubris as well as humility, and

self-centeredness as well as empathy. This will likely lessen tension and create more positive opportunities in these interactions.

Character Strengths and Optimal Experiences

Strengths can be used to build optimal states such as ▶ flow. Mihaly Csikszentmihalyi (1990) articulated the phenomenology of flow as an engrossing and enjoyable state that is worth doing for its own sake. During flow, time passes, and attention is razor sharp on the present moment activity. The individual becomes one with the activity; thus, both the conscious experience of emotion and the self fade, but only in the immediacy of the experience because the aftermath of flow is invigorating. Flow is maintained through the balance between skill and challenge in which the activity is not so easy that the person finds it boring or too difficult that one is frustrated. Flow is intrinsically motivating and highly enjoyable. Seligman (2002) has proposed that one way to build flow is to identify the salient character strengths of individuals and then help them to find opportunities to use these strengths more often.

▶ Mindfulness is another optimal state that involves observing one's ever-changing present moment experience. Researchers operationally defined mindfulness as two core character strengths, stating it involves the *self-regulation* of attention while employing an attitude of *curiosity*, openness, and acceptance with what one places their attention on (Bishop et al., 2004). Thus, the use of these character strengths and others may help facilitate greater mindfulness (Niemiec, Rashid, & Spinella, 2012), and, in turn, the practice of mindfulness has been shown to nurture a variety of character strengths (e.g., kindness, forgiveness, zest, spirituality).

Signature Strengths

Signature strengths are those highest strengths of character that an individual self-consciously owns and celebrates, which he or she feels a sense of ownership and authenticity ("this is the real me"); the individual feels excited while displaying these signature strengths, learns quickly as they are practiced, feels more invigorated than exhausted when using them, and creates and pursues projects that revolve around them. One particular intervention used widely by practitioners around the world is the "use signature strengths in new ways" intervention. This involves the client first taking the VIA Inventory of Strengths (www.viasurvey.org) to receive their rank ordering of character strengths per the VIA Classification, and second using one of their highest strengths in a way that is new and unique for that client (Rashid & Ostermann, 2009; Linley, Nielsen, Gillett, & Biswas-Diener, 2010; Madden, Green, & Grant, 2011; Mitchell, Stanimirovic, Klein, & Vella-Brodrick, 2009; Mongrain, & Anselmo-Matthews, 2012; Rust, Diessner, & Reade, 2009; Peterson & Peterson, 2008; Seligman, Steen, Park, & Peterson, 2005). This intervention has been found to boost happiness and decrease depression for up to 6 months. But, the benefits of using character strengths are mounting beyond increases to happiness and decreases to depression.

Character strengths use has been linked to increased work satisfaction, work engagement, meaning, self-efficacy, self-esteem, goal achievement, ▶ positive affect, vitality, and lower perceived stress (Govindji & Linley, 2007; Linley et al., 2010; Littman-Ovadia & Davidovitch, 2010; Littman-Ovadia & Steger, 2010; Park, Peterson, & Seligman, 2004; Proctor, Maltby, & Linley, 2009; Wood, Linley, Maltby, Kashdan, & Hurling, 2011).

Additional lines of research (Sheldon & Houser-Marko, 2001; Linley et al., 2010) have provided empirical evidence that employing signature strengths enhances people's well-being by facilitating a motivational sequence of goal selection (e.g., you select a goal that is meaningful for you), goal pursuit (in pursuing the goal, you use your best internal resources), and goal attainment (you successfully complete a project which you

Character Strengths, Table 1 The VIA Classification of Character Strengths. (© Copyright 2012, VIA Institute on Character; www.viacharacter.org)

Wisdom	***Creativity***: Originality; adaptive; ingenuity
	Curiosity: Interest; novelty-seeking; exploration; openness to experience
	Judgment: Critical thinking; thinking things through; open-minded
	Love of Learning: Mastering new skills and topics; systematically adding to knowledge
	Perspective: Wisdom; providing wise counsel; taking the big picture view
Courage	***Bravery***: Valor; not shrinking from fear; speaking up for what's right
	Perseverance: Persistence; industry; finishing what one starts
	Honesty: Authenticity; integrity
	Zest: Vitality; enthusiasm; vigor; energy; feeling alive and activated
Humanity	***Love***: Both loving and being loved; valuing close relations with others
	Kindness: Generosity; nurturance; care; compassion; altruism; "niceness"
	Social Intelligence: Emotional intelligence; aware of the motives/feelings of self/others, knowing what makes other people tick
Justice	***Teamwork***: Citizenship; social responsibility; loyalty
	Fairness: Just; not letting feelings bias decisions about others
	Leadership: Organizing group activities; encouraging a group to get things done
Temperance	***Forgiveness***: Mercy; accepting others' shortcomings; giving people a second chance
	Humility: Modesty; letting one's accomplishments speak for themselves
	Prudence: Careful; cautious; not taking undue risks
	Self-Regulation: Self-control; disciplined; managing impulses and emotions
Transcendence	***Appreciation of Beauty and Excellence***: Awe; wonder; elevation
	Gratitude: Thankful for the good; expressing thanks; feeling blessed
	Hope: Optimism; future-mindedness; future orientation
	Humor: Playfulness; bringing smiles to others; lighthearted
	Spirituality: Religiousness; faith; purpose; meaning

find enjoyable, engaging, and meaningful). The whole process of goal pursuit creates an upward spiral of well-being (Fredrickson & Joiner, 2000). This spiral is not only therapeutic but also helps individuals to flourish.

Summary

The research and practice of character strengths is an emerging science that has already elucidated important discoveries yet is marked by significant potential. Researchers in the science of character are drawing a number of fascinating connections between the use of character strengths and positive outcomes and the manifestation of optimal states. Novel synergies of character strength education, research, and practice are being conceptualized (e.g., Niemiec & Wedding, 2008). Practitioners are finding quick and effective strategies for helping their clients get closer in touch with their best qualities, face suffering and challenges with strength, and pursue life goals by capitalizing on their strengths. In the end, this leads clients to be better informed to answer the question on identity that we opened with and, taken a step further, helps the clients use their positive core toward flourishing (Table 1).

Cross-References

- ▶ Flow
- ▶ Gratitude
- ▶ Mindfulness
- ▶ Positive Affect
- ▶ Satisfaction with Life
- ▶ Self-efficacy
- ▶ Self-esteem
- ▶ Strengths-Based Approaches

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Charitable Donations

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Synonyms

Philanthropy

Definition

Charity is seen as individual benevolence and caring; it refers to efforts to solve common social problems such as poverty. It includes, but is not limited to, helping the sick, the disabled, or the elderly and other form of humanitarian relief. It is found in all major world cultures and religions through time. Charity is not only a religious phenomenon, but it is one of the "five pillars" in Islam and central to Christian and Jewish religious teaching and practice (Anheier, 2005, p. 8). Charitable donations are gifts donated to charity by individuals or organizations. Charitable organizations can be nonprofit organizations, private foundations, or religious organizations/congregations. The donations are usually in the form of money, but can also be clothing, real estate, various equipments, and other assets or services. Volunteering is donating time to beneficial purposes, such as helping the needy.

Description

Charitable donations are essential to different type of nongovernmental organizations (NGO) or religious charitable organizations as a part of the ► civil society. Large donations to charity usually come from companies, trusts, and variety of foundations. The modern way is to get donations (or acquire sponsors) from business corporations, which can, this way, carry out their social responsibility. People also leave money through their wills or as large donations for a cause they feel valuable. These donations are rare, but the financial aid is often larger than in so-called everyday donations.

More casual money donations are smaller, occasional donations, but there are more donors. These fund-raisings are usually done by volunteers who collect money in a box or otherwise from people passing by on a street or a marketplace. Street fundraising, also called as face-to-face fundraising, has settled in many organizations. Face-to-face actors approach people on public places, and the aim is to get them to commit on certain cause by donating a small sum of money every month. It is a very effective way of targeting certain locations and identifying people who might become monthly contributors. This originated in Austria spreading to England in 1997, when Greenpeace started using it. Also being a sponsor to a child or becoming a godparent is a way to become a monthly donor. In many children's organizations, this is an essential way to collect funds and get people to commit. The benefit from monthly payments is that the organization can predict their financial situation.

In the days of information society, televised events are combined with donations by phone calls, text messages, or Internet payments. Media has its essential place on charity. It brings the causes closer and appeals to emotions at the same time that it gives people information about the cause. When 2004 tsunami hit the holiday resorts in the shores of Indian Ocean or the earthquake in Haiti 2010, international charity organization profits on charity markets raised quickly to new highs. Social media is a newcomer on collecting money, but it is raising fast especially among young adults.

Motivations

The question "Why individuals help others" still attracts researchers. The phenomenon is universal and an intersection of various disciplines, psychology, evolutionary biology, economics, and sociology among other. People donate money to numerous causes: small residential communities and sports clubs, culture, political and religious causes and offerings, or people in need near or far. The social connections are usually estimated when studying donating behavior. It can also be estimated on the grounds of people being related or otherwise socially connected. Although dividing people to close ones and strangers is obviously difficult nowadays in diverse societies, unselfish donating is most distinctive when a person helps a stranger. Prosocial, altruistic behavior is often referred to concern particularly helping strangers, and human are unique in this type of cooperation. When giving money to charity,

the aim is usually to help people that are not previously known to the donor.

When altruism presumably exists, the human capacity to internalize ▶ norms transfers the positive behavior through generations (Durkheim, 1951; Mead, 1963; Parsons, 1967). Socialization theory suggests that the helping behavior is learned. Prosociality transfers socially in three ways. Firstly the behavior transfers vertically from parents to their children. Secondly, transmission occurs as a result of a horizontal peer-group interaction. Thirdly, humans internalize norms through cultural transmission, such as school, mass media, or religious rituals (Gintis, 2003, pp. 156–157.) Studies on volunteering are close to studies on charitable donations (e.g., Haski-Leventhal, 2009; Lähteenmaa, 1999; Nylund, 2001).

Economists and biologists base their scientific views mainly on individual advantage that can be gained from helping (Blackmore, 1999). The advantage might be prestige or hoping to get something in return. Reciprocal actions are taken with the expectation of future positive responses.

Modern values often emphasize economical and individual choices; the personal success and prosperity are seen as the main indicator of one's value. The organizations that base on donations and volunteering are an exception on these values by founding on unselfishness, compassion, and altruism. In order to sustain these values, there is also a need for a socially rewarding society which values the effort. According to Pierre Bourdieu (1998), unselfish and altruistic behavior is possible only in a society in which the value system upholds and rewards this kind of activity. If not, motivational conflicts may arise (Bourdieu, 1998, p. 144). In order to sustain prosocial behavior, the institutional structures influence on the possibilities to do so. Civil society is connecting people's willingness to help the ones in need.

Institutions

Institutional structures consist of three pillars (Scott, 2008): cultural cognitive, normative, and regulative. With the basis on cultural cognitive, historical and cultural (e.g., values of common good and helping) environment arise further the normative (informal rules) control of behavior (e.g., attitudes towards various causes and helping in general, self-regulation). The formal rules of society and the institutional structures have a strong stand on regulating helping behavior. The laws and regulations create the framework in which the civil society embeds. NGOs often add to the state or municipality services and the organizations need a favorable environment to work in. This arrangement benefits both. Also the donors need institutions: for example, in many countries, charitable donations are encouraged with tax deductions, and different laws protect people from frauds (Scott, 2008, pp. 48–51).

Helping behavior is an essential part of humanity, known in societies through different cultures and times. The study of charity and charitable donations is an essential part of ▶ altruism studies. Study of altruism and prosociality offers different views to the subject. Essential concept when studying charitable donations is also ▶ solidarity. Solidarity is unity based on community of interests, objects, or standards. Solidarity describes a feeling of holding together an intention to stand for each other (Bierhoff & Küpper, 1999). Solidarity is a feeling that moves people to action; it is a form of unity (Scholz, 2008, pp. 17–19). In this aspect, it is a central feature of civil society. These factors reflect the social atmosphere people live in and are a central indicator of ▶ social cohesion.

Charitable organizations work for the betterment of society by helping people in various ways. These organizations depend on voluntary donations and fund-raising activities in order to continue their work. Different countries, cultures, and religions have their own way of giving. The traditions and practices originate in history, religions, and customs evolving continuously. The capability and willingness to help others and the sensitivity to identify and react to others' needs, in homeland or abroad, reflect the strength of ▶ civil society.

The institutional structures are essential. Since the study of Professor Richard Titmuss (1907–1973) *The Gift Relationship* (*1971*), social politicians and welfare sociologists have paid some attention to institutional structures that allow people to experience and show solidarity towards fellow citizens by donating resources like money or blood. Titmuss was maybe too narrowly concentrated on the altruistic motives of a donor when other motivations like fairness and gratitude of forgiveness are also possible. Also selfish attitudes are possible (Le Grand, 2003; Taylor-Gooby, 2009).

Global

Charities Aid Foundation studied in 2010 how societies vary on helping behavior across the globe by analyzing the charitable behavior of 95 % of the world's population (153 countries). The Word Giving Index was combined from three variables so that it would reflect the diverse and unique nature of charitable behavior. These variables were donating money to charity, volunteering, and helping a stranger. The helping behavior varied globally tremendously. All in all 30 % of the world's population had given money to charity. Helping a stranger who needed help was the most common way (45 %), and 20 % of the world's population had volunteered time. Cultural variations effect on opinions on what is charity or, in many cases, also on what is a family. Giving money and people's own assessment on their happiness was a stronger dependency than the GDP of a nation. Giving money is concluded to be a more emotional act than a rational one (Charities Aid Foundation [CAF], 2010).

One form of self-regulatory organizations is European Fundraising Association (EFA). With this type of regulation, the aim is to build public trust and common rules to the field. The first formal document that aims to govern fund-raising activity worldwide was the International Statement of Ethical Principles in Fundraising in October 2006. It identified five important principles for acting as a fund-raiser and building public trust. The principles are honesty, respect, integrity, empathy, and transparency.

Helping behavior, such as donating to charity, is a relevant field of study in the era ruled by competition, markets, and media. These factors enforce the values which are internalized while making everyday choices. The world of values is undergoing changes and so are the perceptions on personal responsibilities towards others. The ongoing change effects also to the field of charities through fundraising costs and through the changes in general values of those who participate in charitable giving.

Cross-References

- Altruism
- Helpful Behaviors
- Non-governmental Organizations (NGOs) in Indonesia
- Philanthropy
- Socialization
- Volunteering

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Charitable Organization for Sustainability Assessment

▶ Fraser Basin Council Sustainability Reporting

Chauvinism

▶ Ethnocentrism

Chauvinism and Religion

▶ Religion and Sexism

Cheerfulness

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Synonyms

Good spirits; Hilarity; Merriness

Definition

Cheerfulness denotes an individual's actual (as a mood state) or habitual (as a trait or temperament) disposition for amusement and laughter including seeing the bright side of life and taking adversity less seriously. Trait cheerfulness contributes to quality of life or overall well-being by enabling individuals to positive emotions and maintaining them in face of adversity, and longer lasting states of cheerfulness may be seen as element of well-being.

Description

Trait cheerfulness received theoretical and empirical attention by personality psychologists at the beginning of the last century. Meumann (1913) regarded cheerfulness as one of twelve basic temperaments equal to the well-known sanguine, choleric, or melancholic temperaments. Two dimensions were used to classify these temperaments: pleasure versus displeasure separated cheerful from (among others) serious and grumpy, and the dimension of shallow versus profound separated (among others) grumpy from cheerful and serious. Thus, cheerfulness is characterized by pleasure and profoundness. Later, Lersch (1962) did contrast cheerfulness and hilarity/merriment in his phenomenological approach. While both concepts share the elements of inner brightness, lightness, and relaxation, cheerfulness is more contemplative, pensive, profound, calm, and inward. Hilarity, however, was seen to be thoughtless, superficial, shallow, and outwardly directed. Young (1937) reported a positive relationship between retrospectively reported cheerful mood (i.e., state cheerfulness) and frequency of laughter during the last 24 h.

More recently, cheerfulness was examined in relation to amusement, smiling, and laughter. Ruch, Köhler and van Thriel (1996, 1997) distinguished between *trait cheerfulness* (as affect-based temperament presumably with a genetic basis) and *state cheerfulness* (as a transient mood) and suggested that both are needed to

account for individuals' readiness for positive emotions and laughter. Trait cheerfulness was used to describe the interindividual disposition (i.e., variations among people) for laughter, and amusement and state cheerfulness should account for the intraindividual variation (i.e., changes across situations). A reciprocal relationship was postulated as well (Ruch et al., 1996): laughter and positive emotions will, in turn, change the level of cheerfulness. In the past few years, cheerfulness was studied in the context of well-being. Correlations between cheerfulness and life satisfaction were established, and scientifically grounded training programs to enhance cheerfulness were designed and empirically evaluated (Hirsch, Junglas, Konradt, & Jonitz, 2010; McGhee, 2010; Papousek & Schulter, 2008, 2010) and the neuropsychology of cheerfulness was explored (Rapp, Wild, Erb, Rodden, Ruch, & Grodd, 2008) (for a review, see Ruch & Hofmann, 2012).

A structural model was put forward and tested in which both state and trait cheerfulness were operationalized with the help of facets. The "state-trait model of cheerfulness" suggests that trait cheerfulness is composed of five intercorrelated components, namely, a prevalence of cheerful mood, a low threshold for smiling and laughter, a composed view of adverse life circumstances, a broad range of active elicitors of cheerfulness and smiling or laughter, and a generally cheerful interaction style. While overall trait cheerfulness is treated as a unidimensional concept, at a more specific level, the distinction of the components of cheerfulness and hilarity (as sketched earlier by Lersch) is possible. Likewise, state cheerfulness is defined by the presence of a cheerful mood state, which is tranquil and composed, as well as by the presence of hilarity, which is a merry mood state, shallow and outwardly directed. The functional independence of these two highly correlated components of state cheerfulness was established through prior studies which involved the playful induction of different forms of positive mood (e.g., via guided imagery tasks, created situations of different affective value, jokes and cartoons, funny videos, humorous interactions) and the assessment of the resulting mood state via a comprehensive set of words relating to cheerfulness as a state.

The Measurement of Cheerfulness as Trait and State

The State-Trait-Cheerfulness-Inventory (STCI; Ruch et al., 1996, 1997) provides a reliable, valid, and economical assessment of cheerfulness as a trait and as a state. It was developed pursuing a rational-theoretical construction strategy. In addition to cheerfulness, the STCI measures also seriousness and bad mood as states (STCI-S) and traits (STCI-T). The STCI is available in different versions for children, youth, and for adults, and several language versions exist (e.g., Chinese, English, German, Spanish). For the assessment of cheerfulness as a trait (STCI-T), short and long form exist for both self and peer report. The STCI-S assesses state cheerfulness as a current mood state, but also forms exist to describe predominant mood states of the last week, last month, or last year. All versions use a 4-point answer format (strongly disagree to strongly agree).

Psychometric Characteristics

Application of various forms of the STCI shows that the psychometric properties of the scales are satisfactory and replicable across countries. For example, Cronbach Alpha coefficients for the cheerfulness scale turned out to be high in different samples (.92 to .94 for the STCI-T and .93 to .94 for the STCI-S). Furthermore, trait cheerfulness is relatively stable for short time intervals (retest-reliability of .84 for a period of 1 month); the transient nature of states is underscored by the low coefficient (.33) obtained for state cheerfulness. The STCI-S is sensitive to changes in the environment (Ruch & Zweyer, 2001). Pre-post differences in level of state cheerfulness were found for experimental conditions with varying stimuli (ranging from serious to humorous), social situations, different type of interactions, sessions of a humor

training program, and clown interventions, but also pharmacological conditions (laughing gas, kava-kava).

There are no gender differences in trait cheerfulness and in general, cheerfulness remains stable across the life span. However, for one of the components ("composed view of adverse life circumstances"), a steady increase can be found after the age of 40; people seem to adopt a more lighthearted view of the adversities they encounter in life and this tendency increases even more after the age of 60 years. Using self-report and peer report (three friends filled in the peer version of the STCI-T) data on the STCI-T, but also and aggregated state data (STCI-S administered on 8 successive days). Carretero-Dios, Eid, and Ruch (2011) found very high convergent and discriminant validity for the scales of the different versions of the STCI. This is notable as trait cheerfulness is a socially desirable trait.

Cheerfulness and Its Relation to Amusement and Laughter

Every person is in a cheerful state now and then; however, experiments demonstrate that high the trait cheerful differ from the low trait cheerful with respect to frequency, threshold, intensity, and duration of state cheerfulness (Ruch & Köhler, 2007). Most importantly, trait cheerful individuals seem to have enhanced thresholds for antagonistic states; i.e., it takes more powerful stimuli and interventions to bring them out of cheerful mood. Several experiments show that trait cheerful individuals "keep their humor" when facing adverse situations (e.g., when having to elaborate on negative proverbs; when having to work in a dark, badly lit, depressing room; Ruch & Köhler, 2007), while low trait cheerful people lose their humor and get grumpy or sullen; i.e., the cheerful states of high trait cheerful individuals are more robust. When in a low cheerful state, high trait cheerful people regain a cheerful mood faster than low trait cheerful individuals do.

Furthermore, there is ample evidence that both state and trait cheerfulness are predictors of laughter and the intensity of positive affect (Ruch & Köhler, 2007). Experiments confirm that only individuals in a high cheerful mood smile and laugh more often to jokes in social situations, and the laughter of an instructed model is only contagious for them. Trait cheerful individuals are more likely to laugh than individuals low in trait cheerfulness when involved in a clownesque interview, inhaling nitrous oxide, or watching funny films, and cheerful individuals recall an amusing event more quickly than low trait cheerful individuals (Ruch, 1997).

The Role of Cheerfulness in Humor

The robustness of cheerful mood found among trait cheerful individuals suggests that trait cheerfulness and the "sense of humor" overlap conceptually. Indeed, cheerfulness as trait and state explains individual differences in readiness for amusement and predicts affect-based humor behavior like smile and laughter. Furthermore, it also accounts for a variety of phenomena, such as appreciation of types of humor, quantity of humor production, keeping or losing humor when facing adversity, and it has been shown to be a moderator to stress just. Finally, the STCI-T was shown to correlate substantially with various inventories measuring "sense of humor" and also with behavioral measures of humor. For example, factor analysis revealed that the available sense of humor scales and the facets of cheerfulness merge in a potent factor that comprises elements, such as a prevalent cheerful mood, smiling and laughter, coping humor and cheerful composedness, humor under stress, laughing at yourself, initiating humor, enjoyment of humor, verbal humor, finding humor in everyday life, socially warm humor, and a positive attitude to things being related to cheerfulness and playfulness (Ruch, 2008). This finding suggests that current measures of "sense of humor" actually account for cheerfulness rather than for humor. Nevertheless, cheerfulness should not be equated to the "sense of humor." For example, as it is a unipolar construct, its low

pole can only partially account for the phenomena typically subsumed under "humorlessness."

Cheerfulness and Quality of Life

Cheerfulness as state and trait as personal resources contribute to the quality of life in two ways, namely, through bringing about positive affect and helping to maintain it when facing adversity. Thus, a "hilarity pathway" describes how funny and playfully processed incongruities lead to positive emotion and laughter. Here positive affect is induced by a positive situation. In the "cheerful composure pathway" (akin to resilience), trait cheerfulness is an antagonist to the effects of adversity on mood level and emotion, a part of a psychological immune system that helps as a puffer against adversity. Prior research has shown that high trait cheerful individuals do not only cope better with experimentally induced adversity, but also with stress in everyday life; they use healthier coping strategies, such as relaxation to deal with stress, than low trait cheerful people. Moreover, high trait cheerful persons report less psychosomatic disturbances such as headache, tonicity, or Cardiac and Circulatory Troubles and react differently to experimentally induced pain (Ruch, 2008; Ruch & Köhler, 2007; Ruch & Zweyer, 2001). Trait cheerfulness is a predictor of satisfaction with life among children as early as in the ages between 10 and 14 years, it is positively related to the life of pleasure (but also to a minor extent to life of engagement and meaning). Trait cheerfulness predicts life satisfaction even when the effects of the three orientations to happiness are being controlled for, and it predicts a variety of positive outcomes in research as diverse as education, mental health, and perceived physical health.

Discussion

While cheerfulness has been related to different indicators of well-being as comprehensive study linking its components (hilarity, cheerful composedness) to quality of life is still missing. Also long-term studies of the effects of cheerfulness are not yet conducted. Intervention studies do show that there is an impact on state but also (in the short term range) on trait cheerfulness. Cheerfulness should be studied in connection with seriousness, as playful cheerfulness and serious cheerfulness will yield different outcomes. Long-term cheerful mood state might also serve as one indicator of quality of life.

Cross-References

- ▶ Education
- ▶ Happiness
- ▶ Health
- ▶ Life satisfaction
- ▶ Quality of Life
- ▶ Self-Reported Health
- ▶ Well-Being

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Child Abuse

▶ Parental Satisfaction and Child Maltreatment

Child Abuse Potential Inventory (CAPI)

▶ Parental Satisfaction and Child Maltreatment

Child and Adolescent Life Satisfaction

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Synonyms

Adolescent well-being; Child well-being; Life satisfaction of adolescents; Life satisfaction of children; Life satisfaction of youth; Youth well-being

Definition

▶ Life satisfaction is the cognitive evaluation of ▶ quality of life as a whole. The construct was defined by Shin and Johnson (1978) as "a global assessment of a person's quality of life according to his chosen criteria" (p. 478).

Description

According to Andrews and Withey (1976), ▶ positive affect (PA), ▶ negative affect (NA), and ▶ life satisfaction (LS) make up the three separable components of ▶ subjective well-being (SWB). The first two components (PA, NA) refer to the emotional or affective aspects, whereas LS refers to the cognitive-judgmental aspects (Diener, 1984). The affective components of SWB are based on the short-lived and fluctuating emotional responses that are representative of the nature of everyday life (Gilman, Huebner, & Laughlin, 2000), whereas LS is based on overall cognitive appraisals of quality of life and thus is not typically susceptible to change due to short-term emotional reactions to life events. Therefore, LS is considered not only to be a more stable component (Eid & Diener, 2004), but also the key indicator of positive SWB (Diener & Diener, 1995), and consequently the indicator most amenable for inclusion in studies of youths' perceptions of their life circumstances (Huebner, Suldo, & Gilman, 2006).

In arriving at overall evaluations of life, individuals typically use their own set of criteria and standards in weighting the different aspects of their lives (Shin & Johnson, 1978). Consequently, it is often more meaningful to assess global judgments of LS rather than satisfaction with specific life domains (Diener & Diener, 1995). However, when a more differentiated assessment is required for purposes of focused diagnostic, prevention, and intervention efforts, measures of multidimensional LS may be required (Huebner, 2001). Nevertheless, the LS construct incorporates the full range of satisfaction (i.e., from very low to very high) (Huebner, 2004).

Models of Life Satisfaction

Life satisfaction measures are typically derived from three conceptual models or frameworks: unidimensional (i.e., global and general LS) and multidimensional (Huebner, 2004). Measures representative of unidimensional models present an overall total score as indication of individual levels of LS. Whereas, multidimensional measures provide a profile of LS across various domains (i.e., satisfaction scores are calculated for each domain) (Huebner, 2004). The two unidimensional models differ in that for the global model the total score is derived from context-free items that allow individuals to use their own unique criteria on weighting the different aspects of

their lives (Pavot & Diener, 1993). In contrast, in the general model the total score is the sum of LS reports across predetermined domains included by the authors (e.g., satisfaction with relationships, physical well-being, personal development) that are considered crucial to the contribution of overall LS (Gilman & Huebner, 2000). The key difference between unidimensional and multidimensional models and measures of LS is that under the unidimensional framework the emphasis is on providing a single total LS score, whereas under the multidimensional framework the emphasis is on creating a profile of LS across multiple life domains.

Measures of Child and Adolescent Life Satisfaction

Global unidimensional scales:

- The Students' Life Satisfaction Scale (SLSS; Huebner, 1991)
- The ▶ Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985)

General unidimensional scales:

- The Perceived Life Satisfaction Scale (Adelman, Taylor, & Nelson, 1989)
- The Brief Multidimensional Students' Life Satisfaction Scale (Seligson, Huebner, & Valois, 2003)

Multidimensional scales:

- The Extended Satisfaction with Life Scale (Alfonso, Allison, Rader, & Gorman, 1996)
- The Multidimensional Students' Life Satisfaction Scale (Huebner, 1994)
- The Multidimensional Students' Life Satisfaction Scale – Adolescent version (Gilligan & Huebner, 2002)
- The Comprehensive Quality of Life Scale (Cummins, McCabe, Romeo, & Gullone, 1994)

Child and Adolescent Life Satisfaction Research

Youth LS is a key indicator of mental health and is positively related to a broad spectrum of positive personal, psychological, behavioral, social, interpersonal, and intrapersonal outcomes (see Proctor, Linley, & Maltby, 2009 for a review). The following sections contain summaries of the current major findings of the child and adolescent LS literature as it pertains to the promotion of well-being in youth.

Levels of Life Satisfaction

Similar to findings of adult studies, various international studies have found that children and adolescents report their LS to be in the positive range, including studies involving special groups. Research findings also demonstrate that global LS tends to decline slightly with the onset and progression of adolescence and that these findings are similarly supported by international research.

Demographics

In general, research has consistently shown that the relationship between demographics (i.e., age, gender, and race) and LS is weak and that these variables contribute only modestly to the prediction of youth LS. However, findings with regard to the effects of socioeconomic status on LS are mixed (Ash & Huebner, 2001). Similarly, with regard to race, some studies have found that African-American students report lower levels of satisfaction in specific domains than Caucasian students, whereas others have found no differences. Overall, students' perceptions of their global and domain specific LS have indicated that there are modest relationships between demographics and specific domains (Huebner, Drane, & Valois, 2000). Nevertheless, the modest contributions of demographics on youth LS are consistent with those reported for adults (see Diener, 1984), suggesting a continued weak association throughout life.

Personality

▶ Personality and temperament variables have been demonstrated to account for most of the variance in SWB (Emmons & Diener, 1985). As discussed by Diener (1996), the genetic and heritable effects of personality, including PA and NA and the influences of temperament, are evidenced from infancy and predispose

individual levels of SWB. Moreover, these heritable traits remain throughout life and thus have their greatest effect due to their stable long-term impact. Studies which have examined the relationships among ▶ happiness, ▶ extroversion, neuroticism, and self-reported ▶ social competence suggest that happiness is positively associated with extroversion and negatively associated with neuroticism and that self-reported social competence acts as a mediator between temperament variables and happiness.

Life satisfaction has also been consistently positively associated with ▶ self-esteem, with moderate positive correlations are found between LS and self-esteem among youths. Moreover, these correlations have proved to be consistent across LS measures, including the MSLSS, the SLSS, and the BMSLSS.

Health and Health-Risk Behaviors

Youth LS is positively related to physical exercise and social interest, physical health, and a healthy diet. An additional key factor in the LS of young people is individual perceptions of participating in meaningful instrumental activities, including those that involve and facilitate flow, engagement, and purpose.

In contrast, substance use and abuse during adolescence is associated with a host of deleterious consequences across multiple life domains including school dropout, delayed entry into the labor force, job instability, job dissatisfaction, early marriage and divorce, impaired relationships with family and friends, and early parenthood (see Rohde, Lewinsohn, Seeley, & Klein, 2007 for a review). For example, binge drinking and use of tobacco (i.e., cigarettes and chewing tobacco), cocaine, alcohol, marijuana, and steroids are all negatively related to self-reported LS. Similarly, dissatisfaction with life has also been linked to violent and aggressive behaviors including physical fighting, carrying a gun, carrying a weapon, riding in a car with an impaired driver, ▶ bullying, dating violence, and forced-sex victimization/perpetration. Overall, research findings suggest that health-risk behaviors initiated in youth are associated with behavioral, psychological, psychosocial, and physical factors that continue for a lifetime. Thus, the long-term risks associated with adolescent health-risk behavior underscore the importance of early prevention and intervention (Georgiades & Boyle, 2007). Indeed, promotion of positive youth development is of paramount importance in enabling LS and mitigating the risk-taking behavior among youths (Sun & Shek, 2010).

Employment and Productivity

Research with adolescents has indicated that youths who leave school and do not subsequently become employed report lower levels of self-reported activity, perceived competence, and LS, and increased depressive affect (Feather & O'Brien, 1986). However, by supporting the connection between career adaptability and positive youth development through vocational education and social support, young people experience an increased sense of power and LS (Hirschi, 2009). For example, O'Brien, Feather, and Kabanoff (1994) found that employed youth have higher adjustment levels, lower depressive affect, higher LS, greater commitment to values, more internal control, and higher perceived competence than low-quality leisure unemployed youth.

Similarly, conscious goal pursuit has long been linked with increased SWB and happiness (Deci & Ryan, 2000). Goal-directed behaviors related to increased LS among youths include perfectionism and achieving personal standards, hope, and ▶ self-efficacy.

Familial and Environmental Factors

Familial variables, such as ▶ family structure, parenting style, parental emotional and ▶ social support, and family conflict, play a crucial role in the attainment of youth LS. Specifically, youth LS is positively correlated to authoritative parenting, perceived parental support, perceived quality of attachment to parents, perceived loving parental relationship, and parental marital status and family structure. Quality of the immediate physical and social environment has also been shown to be pertinent to youth LS. Furthermore, youth who are moved from their homes into

residential treatment centers experience changes in LS in relation to length of stay.

Other familial and environmental factors that affect youth LS include parental alcoholism and adolescent pregnancy. For example, Braithwaite and Devine (1993) found that parental alcohol dependency and family disharmony made significant independent but additive contributions to life dissatisfaction.

Research has also indicated that youth LS is associated with life events and experiences. For example, McCullough, Huebner, and Laughlin (2000) found that minor daily events (e.g., fights with friends, doing poorly on an exam, enjoying a hobby, helping other people) contributed unique variance over and above that of major life events (e.g., death of family member, divorce). Similarly, Suldo and Huebner (2004a) found negative correlations between LS and ▶ stressful life events, externalizing behavior, and internalizing behavior.

Social Support

Both being involved in supportive relationships with parents and peers and the perception of adequate social support from significant others is essential to positive mental health throughout development. Although reliance on support can shift from parents to peers as age increases, it is adolescents' perception of parental involvement, relationship with parents, and family functioning that has the greatest impact on level of LS, over and above stressful life circumstances (Suldo & Huebner, 2004b). Indeed, authoritative mothering and cohesive family relationships are positively associated with LS and negatively associated with ▶ anxiety and depressive symptoms.

Adequate social support from friends is also an essential element of positive mental health among youths. For example, Burke and Weir (1978, 1979) found that adolescents were more likely to speak to peers about their problems, were more satisfied with the responses provided by their mothers and their peers than their fathers, and felt freer to take problems to their peers than to either their mothers or their fathers.

Acculturation

The acculturation and psychological ▶ adaptation of adolescents of immigrant families has important implications for LS as young people experience changes in identity, ▶ attitudes, values, and behaviors as a function of intercultural contact (Ward, 2006). Consistent predictors of immigrant youth LS include ▶ self-efficacy, task-orientation, health, and marital status of parents, voluntary (and non-economically motivated) migration circumstances, length of residence, cultural identification and orientation, perceived discrimination, and mastery. Research findings suggest that providing environments that support cultural integration and opportunities for developing a sense of mastery may improve the LS and successful acculturation of immigrant youths.

Disabilities and Specific Groups

Increasingly researchers have begun to examine LS as it pertains to specific groups, such as those with disabilities or receiving special services in schools. For example, research among deaf and hard-of-hearing youths has indicated significant differences in global LS for those educated in segregated residential settings in comparison to those attending day schools. Similarly, studies of children diagnosed with mild mental disabilities (MMD) have revealed that MMD students who are in self-contained special education settings have significantly higher school satisfaction than that of peers with MMD who spend three or more hours in a regular educational setting. ▶ Integration and inclusion in the community is also an issue for those suffering with intellectual disabilities. For example, Bramston, Bruggerman, and Pretty (2002) found that adolescents with intellectual disability reported lower use of community facilities and felt less belongingness and control over their choices than did their matched peers.

In contrast to examinations of specific groups with disabilities, research has begun to examine the benefits to psychological well-being that accompany superior intellectual ability and extremely high LS. Specifically, recent empirical evidence suggests that youths with extremely high levels of LS benefit from increased adaptive psychosocial functioning,

intrapersonal, interpersonal, and social relationships, academic success, and decreased behavioral problems, over and above those with average levels of LS. Increased LS is also associated with multiple school-related variables, including school satisfaction, teacher support, and perceived academic achievement, competence, and self-efficacy (see Suldo, Riley, & Shaffer, 2006 for a review). Similarly, superior intellectual ability and giftedness is related to increased satisfaction with school experience and academic success.

Psychopathology

As noted by Greenspoon and Saklofske (2001), until the last few decades the absence of psychopathology (PTH) has been considered indicative of positive mental health and SWB. However, with the advent of positive psychology the need for psychologist to assess SWB and PTH together through an integrated system has been elucidated. Indeed, evidence suggests that high PTH can be accompanied by high SWB, just as low PTH can be accompanied by low SWB. For example, Suldo and Shaffer (2008) examined the existence and utility of a dual-factor model in early adolescence and found that students with complete mental health (i.e., high SWB, low PTH) had better reading skills, school attendance, academic self-perceptions, academic-related goals, social support from parents and peers, self-perceived physical health, and fewer social problems than vulnerable youths (i.e., low PTH, low SWB). Among students with clinical levels of PTH, students with high SWB (symptomatic but content youth) perceived better social functioning and physical health. Overall, results support the existence of a dual-factor model and the importance of high SWB to optimal functioning during adolescence.

Research findings from adult studies indicate that depression and LS are correlated negatively to the point of being near opposites (Headey, Kelley, & Wearing, 1993). Such findings have been substantiated through research with youths where self-reports of LS and depression have been compared. For example, Adelman et al. (1989) found that American students referred for mental health services had lower LS, less perceived control at school, and higher levels of depression in comparison to those attending in regular classrooms.

Research has also consistently indicated that youth LS is associated negatively with loneliness, suicide, emotional disturbance, and insomnia. Several possible explanations for why children experience loneliness have been put forward, including: deficiencies in the parent-child relationship, inability to form close intimate friendships, poor peer acceptance, peer victimization, and negative subjective evaluations of parent and/or peer relationships. Among youths, research suggests that personal characteristics are associated with increases in the experience of loneliness. For example, Moore and Schultz (1983) found loneliness to be positively correlated with state anxiety, locus of control (LOC), depression, public self-consciousness, and social anxiety, and negatively correlated with self-reported ▶ attractiveness, likeability, happiness, and LS among American adolescents.

Several independent variables are significantly associated with suicide behavior in youths, including poor mental health, poor mental/physical health days, serious suicide consideration, planning for suicide, attempted suicide, suicide attempt requiring medical care, physical fighting, property stolen at school, using pills to lose weight, beating up the person you are dating, age of first alcohol use, use of marijuana at school, and ▶ exercise.

Investigations into the utility of LS assessments as a compliment to PTH evaluations among youths with serious emotional and behavioral disorders have indicated that LS measures accurately discriminate between non-PTH youths and youths classified as seriously emotionally disturbed, emotionally handicapped, and educably mentally handicapped. Further, studies have demonstrated that youths suffering with emotional (i.e., poor perceived mental health, dissatisfaction with life, and unhappiness) and behavioral (i.e., interpersonal problems at home and school) problems are less likely to report poor mental health and behavioral problems in comparison to parental or caregiver reports of their mental health.

Similarly, youths who suffer from sleep disorders or lack of sleep due to insomnia have been found to report more psychopathological, psychophysiological, and psychosomatic problems, including depression, anxiety, headache, stomachache, and ▶ fatigue, than adolescents with no sleep disturbances. For example, Roberts, Roberts, and Chen (2002) examined the impact of insomnia on somatic, interpersonal, and psychological functioning and found that baseline insomnia increased the subsequent risk of psychological (self-esteem, LS, perceived mental health, and depression) dysfunction 1 year later.

Character Strengths and Positive Psychological Interventions

Examinations into the relationships between character strengths (i.e., virtues) and LS are still just beginning; however, findings from initial studies in this area have illuminated particular strengths of character to be associated with increased LS among youths. For example, Park and Peterson (2006a, 2006b) found the strengths of hope, ▶ love, ▶ gratitude, and zest to be linked to greater LS among children.

Positive psychological interventions, that is, intentional activities that aim to cultivate character strengths, are also a promising approach to increasing well-being and LS among youths (Sin & Lyubomirsky, 2009). For example, recent research has demonstrated that performing positive psychological exercises, such as counting blessings (i.e., daily gratitude journal-keeping exercise) or counting one's own acts of kindness for 1 week, are associated with increased PA and LS, and decreased NA at follow-up. Further, research has demonstrated that youths who report grateful moods indicate greater SWB, ▶ optimism, ▶ prosocial behavior, gratitude in response to aid, and social support. Similarly, gratitude has also been found to be a motivator of future benevolent actions on the part of the recipient. Specifically, research indicates that gratitude predicts social integrations, prosocial behavior, and LS among early adolescents, which suggests an "upward spiral" of gratitude and happiness.

Exploratory investigations into the teaching of well-being in school through the application of positive psychology interventions and theory has also led to reliable improvements in students' well-being (see Seligman, Ernst, Gillham, Reivich, & Linkins, 2009 for a review). For example, the Positive Psychology Program was demonstrated to increase enjoyment and engagement in school and improve social skills among adolescent students. Similarly, C. Proctor et al. (2011) have demonstrated that application of a general character strengths-based intervention program in the school curriculum, which enables students to participate in multiple and varied character strengths-based exercises and explore and self-identify with their character strengths, is associated with significantly increased LS.

Character strengths have also been shown to longitudinally predict SWB during adolescence. For example, Gillham et al. (2011) have demonstrated that transcendent, temperance, other-directed, and intellectual strengths significantly predict greater LS, and that other-directed strengths and temperance at the start of high school predict fewer symptoms of depression by grade 10; hope and optimism have also been shown to predict LS in adolescents with cognitive disabilities. Similarly, hope has been found to be positively related to PA, LS, support from family and friends, and optimism.

Finally, spirituality, positive religious coping, and daily spiritual experiences have also been show to be positively related to PA and LS among youths. These results suggest that holistic approaches to increasing well-being should consider the use of positive religious coping strategies among youths who are religious and the role of spirituality in early adolescents' psychological well-being (Van Dyke, Glenwick, Cecero, & Kim, 2009).

Life Satisfaction: More than an Epiphenomenon

Fundamental to the underlying mission of discovering how we achieve happiness is determining the way in which youth perceive their lives. The youth LS literature provides clear evidence to suggest that youth LS is more than just an

outcome of various psychological states (e.g., positive affect, self-esteem), it is also an influential predictor of psychological states and psychosocial systems (e.g., depression, physical health) (Gilman, Easterbrooks, & Frey, 2004). Support for conceptualizations of LS as more than just an epiphenomenon can be found among recent research that has highlighted its role as a ▶ mediator and moderator between the environment and behavior. For example, Suldo and Huebner (2004b) demonstrated that LS mediates the relationship between the social support-involvement dimension of authoritative parenting and adolescent problem behavior. Further, support has been provided for the potential mediating role of LS between stressful life events and internalizing behavior (see McKnight, Huebner, & Suldo, 2002). In addition, there is recent evidence to suggest that increased LS buffers against the negative effects of stress and the development of psychological disorder. For example, adolescents with positive LS have been demonstrated to be less likely to develop later externalizing behaviors as a result of stressful life events than adolescents with low LS, suggesting that LS acts as a moderator for (i.e., buffer against) externalizing behavior (Suldo & Huebner, 2004a).

Conditions Fostering Positive Life Satisfaction

Notwithstanding the genetic and heritable effects of personality, such as, PA and NA and temperament, there are many environmental, familial, and social conditions which foster positive youth LS. Among these are the fundamentally positive outcomes on LS that emerge as a result of a healthy lifestyle, good physical health, exercise, and participation in sports and social activities. Conversely, nonparticipation in risk-taking behavior, including substance abuse (alcohol, tobacco, and illicit drugs), violence, aggression, and sexual victimization, is associated with elevated levels of LS. Similarly, environmental quality, such as living in a safe neighborhood, residing in a well-maintained home, infrequent relocation, good familial and parental relationships, and social support, all engender positive youth LS.

Expanding on past correlational research which has highlighted the many positive conditions that foster positive youth LS is the exploration of the causal pathways, including cognitive mediators and moderators, that may aid in understanding how personality and the environment influence youth LS (Huebner, Suldo, Smith, & McKnight, 2004). For example, Ash and Huebner (2001) demonstrated that adolescent LS was mediated by LOC orientation (i.e., frequent negative life events were related to decreased perceptions of control which was related to lower LS). Similarly, Fogle et al. (2002) demonstrated that social self-efficacy mediates the relationship between extroversion and LS. That is, positive perceptions of social capabilities (i.e., social self-efficacy) served as the mechanism through which extroversion affected LS (Fogle, Huebner, & Laughlin, 2002).

Implications of Positive Life Satisfaction

Recent research has indicated the potential role of LS as a buffer against negative effects of stress and the development of psychopathological behavior (e.g., Suldo & Huebner, 2004a). Such findings are highly significant to the promotion of positive development in youth. In general the research literature suggests that most youth report a positive level of LS. However, concern must be focused on those who fall below this average and how what we know about the relationships between LS, psychopathology, personality, and the environment can aid in the development of strategies aimed at increasing LS among these youths. For example, a survey of 5,544 American students found that 11 % of those sampled fell below the neutral point with 7 % indicating a "terrible" or "unhappy existence" (see Huebner et al., 2000).

The importance of increasing low LS to normative levels and further maintaining those positive levels of LS among youth cannot be overemphasized. Further, attention needs to be drawn to the fact that those benefiting from rich environmental and social resources do not

necessarily display high levels of LS, which may aid in protecting them against the negative effects of stress and the development of psychopathological behavior. In line with the positive psychology movement, learning how to build strength in order to buffer against the development of problems is imperative to the positive development of young people. Youth LS is one such strength.

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Cross-References

- Extroversion
- Gratitude
- Life Satisfaction
- Negative Affect
- Positive Affect
- Self-Efficacy
- Self-Esteem
- Subjective Well-Being

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Child and Family Well-Being

▶ Family Life Cycle Stages

Child and Youth Well-Being Index

▶ Youth Welfare Index

Child and Youth Well-Being Index (CWI)

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Synonyms

Child well-being index; CWI

Definition

The *Foundation for Child Development Child and Youth Well-Being Index* (*FCD-CWI*, *or CWI*, for short) is an evidence-based composite social indicator (or index) of trends over time in the well-being/quality of life of children and young people in the United States.

The CWI is comprised of an overall composite/summary index of changes over time in the well-being of children and youths together with several interrelated composite subindices of annual time series of numerous social indicators organized into seven domains of well-being. The composite indices give a sense of the overall direction of change (improvement or deterioration) in the well-being of American children and youth, as compared to base years of the indicators, such as 1975, 1985, or 2000, and of which domains of their lives have improved, deteriorated, or remained unchanged over time.

Description

The General Well-Being Question

The initial development of the CWI was described in Land, Lamb, and Mustillo (2001). This was followed by updates, applications, and extensions in Land, Lamb, Meadows, and Taylor (2007) and Land, Lamb, and Zheng (2011). This entry draws on these published articles and on the chapters of the Land (2012) edited volume.

The general question addressed by the CWI is: Are the circumstances of life for children and youth in the United States bad and worsening or good and improving? In terms of the quality of life concepts, the question becomes: Has the well-being of America's children improved or deteriorated?

This question can be addressed in many ways, and the answers can be correspondingly multifaceted and nuanced. There also is a sense in which every child is unique and surrounded by unique circumstances, and thus, there is great diversity in well-being. In an absolute sense, therefore, complete answers cannot be given and certainly are beyond the scope of this brief encyclopedia entry. Limited answers and insights can, however, be provided by the CWI.

Conceptual Foundations

Land et al. (2001) began work on the CWI by noting that much work in the USA by many social scientists and statisticians, such as that by the Federal Interagency Forum on Child and Family Statistics that began in 1997, an annual publication on *America's Children*: *Key National Indicators of Well-Being*, had produced numerous statistical indicators of trends in the well-being of children and youth. It was difficult, however, to extract a sense of the overall direction of changes in well-being from the many diverse statistical series. To bring some order to these data, Land et al. drew on reviews by Cummins (1996, 1997) of empirical studies of the quality of life that suggested that there are a relatively small number of domains that comprise most of the subject areas that have been studied. Specifically, Cummins found that about 68 % of the 173 different domain names and 83 % of the total reported data found in the studies reviewed could be grouped into the following seven domains of life:

- *Economic or material well-being* (e.g.,command over material and financial resources and consumption)
- *Health* (e.g., health functioning, personal health)
- *Safety* (e.g., security from violence, personal control)
- *Productive activity* (e.g., employment, job, work, schooling)
- *Place in community/community engagement* (e.g., socioeconomic (education and job) status, community involvement, self-esteem, and empowerment)
- *Intimacy* (e.g., relationships with family and friends)
- *Emotional well-being* (e.g., mental health, morale, spiritual well-being)

According to Cummins (1996), empirical studies indicate that all of these seven domains are very relevant to subjective well-being. This implies that indices of the quality of life, whether based on objective or subjective data, should attempt to tap into as many of these domains as possible.

Comparisons of the seven domains of well-being identified by Cummins (1996) also can be made with a number of studies of subjective well-being that have focused on children and adolescent samples. Such comparisons show that, in any specific study, most of these seven domains of well-being show up in one form or another, possibly with different names. For instance, Gilman, Huebner, and Laughlin (2000) found the following domains of life related to general life satisfaction in a sample of American adolescents enrolled in grades 9–12 (ordered from greatest to lowest association with general life satisfaction): family (*intimacy/social relationships*), self (*image and sense of self-worth*), living environment (*material well-being*), friends (*intimacy/social relationships*), and school (*productive activity*). While the survey questionnaires used by Gilman et al. do not contain questions on all of the domains identified by Cummins (1996) and cited above, it nonetheless is the case that several of these domains have similar content. In brief, the conceptual framework of the CWI is grounded in prior empirical well-being/quality of life studies that have used a range of qualitative and quantitative research methods.

Key Indicators and Methods of Composite Index Construction

Adopting the seven domains of well-being identified by Cummins (1996) and adapting them to the focus on children and youths, Land et al. (2001) identified 28 *key indicators of well-being* that are easy to understand by broad audiences, objectively based on substantial research connecting them to child well-being and based on reliable data, balanced so that no single area of children's lives dominates the CWI, measured regularly so that they can be updated and show trends over time, and representative of large segments of the target population, rather than one particular group.

Statistical time series data based on annual (calendar year) time periods at the national level on these 28 indicators that can be dated back to 1975 then were grouped into the seven domains. An expanded CWI with 16 additional indicator

time series for a total of 44 that date back to 1995 also has been developed and studied.

To measure changes in overall well-being, Land et al. (2001) adopted an index number approach. An *index number* is a measure of the magnitude of a variable at one point (say, a specific year that is termed the *current year*) relative to its value at another point (called the *reference base* or *base year*). The index number problem occurs when the magnitude of the variable under consideration is non-observable (Jazairi, 1983). In economics, where index numbers are widely used, this is the case, for example, when the variable to be compared over time is the general price level, or its reciprocal, the purchasing power of money.

In the CWI, the variable to be compared over time is the overall well-being of children in the United States – defined in terms of *averages of social conditions encountered by children and youths*. As noted by Ruist (1978), the *index number problem* arises in measuring the general price level due to the fact that there are multiple prices to be compared. In the case of overall child and youth well-being, there are multiple indicators of well-being to be compared. Over any given historical period, the prices of some economic goods will have risen, and some will have fallen. Similarly, over any period of years, some indicators of child and youth well-being likely will have risen and some will have fallen.

In the case of the general price level, the problem that arises is how to combine relative changes in the prices of various goods into a single number that can meaningfully be interpreted as a measure of the relative change in the general price level of economic goods such as the consumer price index (CPI). In the case of child and youth well-being, the problem similarly is how to combine the relative changes in many rates of behaviors pertaining to child and youth well-being into a single number that can meaningfully be interpreted as a measure of the relative change over time in a fairly comprehensive selection of social conditions encountered by children and youths.

To apply the index number approach to the measurement of changes in the well-being of children, the CWI first fixes a base year for the calculations. The most prior historical base year used by the CWI is 1975, which corresponds to the period in which many of the 28 key indicator time series began to be available at the national level in the USA. Other base years that have been used in various CWI studies are 1985, 1995, and 2000. Given the base year, the CWI then calculates an equally weighted composite index of changes for all indicators within each of the seven domains of well-being. This grouping of indicators by domain follows the recommendations of Hagerty et al. (2001). Empirical analyses have shown, however, that trends in well-being found in CWI analyses are robust to whether the key indicators are grouped or not.

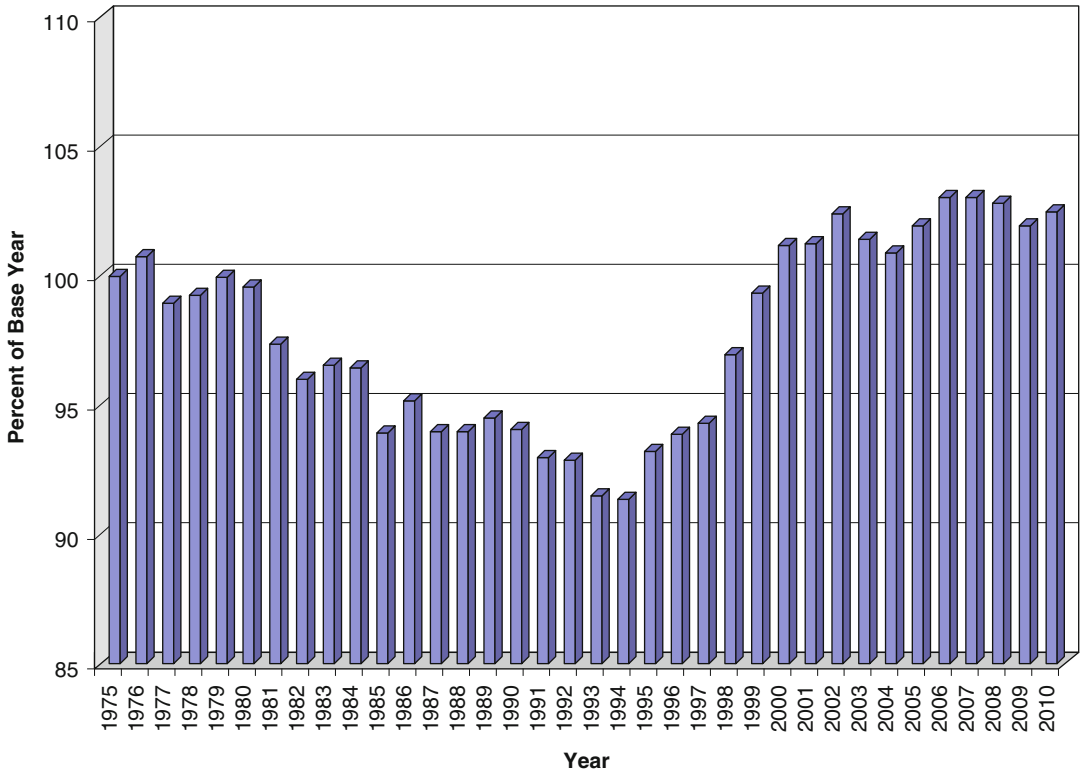
After constructing composite indicators of changes over time for each well-being domain relative to base year levels, the overall composite CWI then is calculated as an equally weighted average for each year of the domain-specific index, values. Initially in Land et al. (2001), the choice of equal weighting methods was based, as in the case of other composite indices such as the Human Development Index on ease of calculation and transparency. Subsequent statistical analyses by Hagerty and Land (2007) showed, however, that the equal weights method of composite index construction produces a *minimax estimator* in the sense that it minimizes disagreements among all possible weighting schemes.

Empirical Findings

Many empirical findings regarding changes in child and youth well-being in the United States over the past several decades have been reported in Land et al. (2001, 2007, 2011), Meadows, Land, and Lamb (2005), Lamb, Land, Meadows, and Traylor (2005), Lee, Land, and Lamb (2009), Hernandez, Macartney, and Cervantes (2012), O'Hare and Vicki (2004, 2009), and in annual reports that are available on the CWI webpage: http://www.soc.duke.edu/~cwi/.

Some findings will be briefly stated here:

- After a period of relative stability for the years 1975–1981, child and youth well-being in the USA, as measured by the CWI, went into



Child and Youth Well-Being Index (CWI), Fig. 1 Child Well-Being Index, 1975–2010

a long period of decline from 1982 through 1994; see Fig. 1. This was followed by a recovery period from 1995 to 2000 and then a relatively stable/slow improvement period from 2001 through 2010.

- The imprints of economic recessions in the years 1981–1982, 1990–1991, 2001–2001, and 2008–2010 are evidenced in downturns in the CWI during those years and immediately thereafter, as some effects are lagged.
- Increases in the CWI in the years after 1995 pierced the 1975 base year level only since 2000.
- The downturn in well-being that occurred in the 1985–1994 period was particularly severe for African American and Hispanic children and youths.
- Consistent with the findings for African American and Hispanic minority children, it has been found that, during time periods of general improvement in child and youth well-being, those children from families at lower socioeconomic status levels tend to show greater increases in their overall well-being than children from families at higher socioeconomic status levels, which appears to be due to "ceiling effects" on a number of indicators for the latter children in the sense that they already are at relatively high levels of well-being; conversely, during periods of general deterioration in child and youth well-being, the well-being of children from families at lower socioeconomic status levels tends to show larger decreases than that of children from families at higher socioeconomic status levels.
- There have been overall improvements in well-being for both males and females since 1985, but there are some domains and indicators in which males have done better and some in which females have done better.

- Historical best-practice analyses reported using the best values on each of the component indicators of the CWI ever recorded for the USA show that the CWI could be almost 30 % higher than its values in recent years.
- International best-practice analyses using the best values of the component indicators recorded in recent years by other nations show that the CWI could be almost 50 % higher than its value in recent years.
- Sensitivity analyses of the CWI show that the Health domain is greatly impacted by the inclusion of the indicator for trends in obese children and youths, and this indicator also has a big impact on the overall childhood (ages 6–11) index.
- The CWI is scalable in the sense that it can be calculated at the level of the 50 US states and/or at metropolitan regional levels beneath the state level.

Conclusions

The CWI was constructed after a long period of development of a statistical time series database of indicators of child and youth well-being in the USA that was very much a product of the social indicators movement of the 1960s and 1970s and the emergence of the well-being/quality of life unifying concepts for social indicators in the 1990s. The CWI established new precedents in several ways:

- The CWI was the first effort to move beyond the focus on multiple individual indicators of separately identifiable aspects of the lives of children and youths to a focus on what the many indicators tell us about what is happening to the "whole child," to her/his well-being.
- The CWI was the first index to identify, based on well-being/quality of life research, specific domains of child and youth well-being to be measured and to attempt to associate specific well-being indicator time series with each. It is in this dual sense that the CWI is evidence-based: both in the use of empirical data on the key indicators of which it is comprised and in its conceptualization of well-being based on prior empirical research.
- The CWI was the first to propose a method of index construction for an overall, summary composite index of changes in child and youth well-being.

Research using the CWI also has helped to identify domains of well-being for which the data base needs to be improved. The specific indicators used in the CWI and its variants are not fixed forever and always. In fact, as the database continues to expand and improve and as the CWI is applied at levels of analysis other than the national level, some indicators in the original 2001 CWI have been, and will continue to be, replaced by others.

In the years since the development of the CWI, there has been a growing interest among social scientists in the measurement of the holistic or overall well-being of children. There also has been a diffusion of the concepts and method of construction of composite indices used in the CWI. This has resulted in the creation of numerous "child well-being indices," and there undoubtedly will be many others in the future. The basic ideas of the CWI, however, will continue to stimulate this field of research.

Cross-References

► Composite Index Construction

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Child Battery

▶ Child Maltreatment: Physical Abuse

Child Care

▶ Parental Time and Child Well-Being

Child Care in the USA

▶ Marriage, Cohabitation, and Child Care in the USA

Child Care Time Spent by Parents

▶ Parental Time and Child Well-Being

Child Combatant

▶ Child Soldiers

Child Deprivation

▶ Child Poverty

Child Development

▶ Child Health and Development

Child Development Index (CDI)

▶ Children's Health Index

Child Friendly Cities

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Synonyms

Child friendly communities

Definition

A child friendly city (CFC) is a city, or, more generally, a system of local governance, committed to fulfilling children's rights. It represents the embodiment of the Convention on the Rights of the Child (CRC) at the local level, which means that children's rights are reflected in policies, laws, programs, and budgets. In a child friendly city, children are active agents: their voices and opinions are taken into consideration and they influence decision-making processes.

As the CFC approach emerged in response to a rapid rate of urbanization, the concept was initially developed for cities, referring to municipalities of different sizes. However, it is now clear that the concept may also include other communities of different types which are promoting a CFC approach. It would be therefore more accurate to speak of "child friendly cities and communities" instead (United Nations Children's Fund: UNICEF, 2009).

As long as an official definition of *child friendly* has never been provided, the concept has also been applied to schools, hospitals, justice, and institutions fostering the principles of the CRC (Hart, Wridt, & Giusti, 2011). For instance, child friendly schools are an example of an educational model promoting learning and development through inclusiveness, participation, and protection, while baby friendly hospitals promote healthy development through breast-feeding.

Description

The concept of CFC has emerged under the auspices of the Child Friendly City Initiative (CFCI) (http://www.childfriendlycities.org) which is a worldwide movement advocating for the fulfillment of children's rights in cities and communities and which is meant to work through both local governments and the organs of civil society. The CFCI was launched in 1996 to act on the resolution passed during the second United Nations: UN Conference on Human Settlements (Habitat II). The Conference declared that the well-being of children is the ultimate indicator of a healthy habitat, a democratic society, and good governance.

A movement of child friendly municipalities started flourishing in low-, middle-, and high-income countries, and an increasing number of cities promoted and implemented initiatives to realize the rights of the child. The CFCI should be seen alongside with other related efforts such as United Nations Educational, Scientific and Cultural Organization: UNESCO's Growing Up in Cities and UN-HABITAT's Safer Cities. The growing interest in CFC is rooted in several factors: the increasing number of children living in cities versus the limited structures and capacities of cities to respond to their needs, a general trend in governmental decentralization, a growing interest in community approaches to meet the Millennium Development Goals, and the recognition that civic engagement and child participation are key ingredients to good governance (Hart et al., 2011).

The CFCI promotes an approach to local development that is based on the CRC and its core principles: nondiscrimination, the best interests of the child, the right to life, survival and development, and the respect for the views of the child. The approach, articulated around nine building blocks defined by the CFC Framework for Action, involves the simultaneous engagement of citizens and of government and nongovernment agencies in improving governance for children at the municipal level. The building blocks include the following: child participation, child friendly legislation,

a comprehensive strategy on child rights, a child rights coordinating mechanism, assessment of policy impact, allocation of resources for children, a regular state of the children's report, awareness raising, and an independent voice for children (UNICEF, 2004). The CFC approach promotes the following: (1) broad awareness of children's rights; (2) critical assessment of living conditions and actions undertaken for children; (3) an integrated cross-sectorial approach to the development, implementation, and evaluation of policies, laws, and budgets affecting children; and (4) enhanced participation of children, parents, and caregivers in decisions affecting children.

In 2000, the International Secretariat of CFCI was established at the UNICEF Innocenti Research Centre (IRC) in Florence, Italy. The CFC Secretariat supports the sharing of knowledge and experiences and promotes research and analysis of the strategies and practices to implement children's rights at the local level. Its founding partners were UNICEF, UN-HABITAT, the Italian Ministries of Foreign Affairs and the Environment, the Italian National Committee for UNICEF, and the *Istituto degli Innocenti*. Consistent with the mandate of the IRC to promote understanding of child rights, the CFC Secretariat supports knowledge brokering and facilitates research and analysis on the implementation of children's rights at the local level, as well as on processes and methods adopted by local governments to become child friendly, by:

- Collecting and processing data, documenting innovations, and carrying out field research
- Distilling lessons learned and good practices
- Identifying tools and promoting research to develop innovative tools to build monitor and assess CFC
- Assisting in field consultations and program development
- Organizing and contributing to international, regional, and local meetings on CFC issues
- Networking and building alliances with a wide variety of actors (UN agencies, UNICEF headquarters and country offices, regional and national networks, municipalities, mayors, associations of mayors, communities, experts, and nongovernamental organizations, NGOs)

With the expansion of CFC activities, municipalities have increasingly expressed the need to share experiences and lessons learned. Informal exchanges have gradually developed into regional and national networks. Following Habitat II, CFC partners have gathered in many other international and regional events, among them the subsequent World Urban Fora. In doing so, the CFC movement has mobilized a wide range of partners: local authorities; central government bodies; civil society organizations such as NGOs and community-based organizations (CBOs); communities; national and international agencies; experts and academic institutions; business and the media; and, most importantly, children and youth groups.

The development of a research initiative on CFC and communities was one of the recommendations issued at a consultation on the future of CFC, organized in Geneva in 2008 by UNICEF New York (Adolescent Participation and Development Unit), Geneva Regional Office (Private Fundraising and Partnership Division), and the IRC. The consultation highlighted that although some progress had been attained with regard to the assessment of CFC, this was limited in scope and rarely involved children. The conclusion was that there was a need to improve the assessment of communities for children by developing methods that would involve communities, including the children themselves.

As a consequence, the Child Friendly Cities and Communities Research Initiative was established through a partnership between the UNICEF IRC and Childwatch International, a network of research institutions promoting child rights, with coordination by UNICEF and the Children's Environments Research Group (CERG) of the City University of New York. The Bernard Van Leer Foundation was also a key supporter of the process.

The research initiative is an action research effort as it aims to trigger local participatory development processes, in particular, to engage communities in improving the variety and quality

of data available on children to inform both local action for children and advocacy for improving policies, resources, and services for children. In doing so, it also has the additional value of raising awareness on children's rights with children, caregivers, municipal stakeholders, and community members.

Its goal is to improve the living conditions of children and the fulfillment of their rights in cities and communities of urban settings by (a) enabling children, communities, and service providers to measure the degree of fulfillment of child rights and (b) allowing municipal authorities to engage in a critical discussion on the relevance of governance structures and processes for children. Two sets of tools were developed to achieve this: Child Friendly Community Assessment Tools and Child Friendly City Governance Tools, both available on the CFCI web page (http://www.childfriendlycities.org). The first one comprises a broad set of indicators on the child friendliness of communities. Its purpose is to engage children, parents, and community service providers in the assessment of community conditions for children as a basis for discussions on planning for children and as a guide for action and advocacy. The second aims to help municipal stakeholders reflect on the state of their governance structures and processes for children (Hart et al., 2011).

Among the findings revealed by the Child Friendly Cities and Communities Research Initiative is that thanks to the process children could contribute unique perspectives on their lives while gaining confidence. Divergences were detected in how children, parents, and community service providers scored the conditions for children. Besides, the assessment led an increased awareness of children's rights and how these are connected to community conditions.

Cross-References

- ▶ Age-Friendly Communities
- ▶ Child Participation
- ▶ Child Rights
- ▶ Child Well-Being

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Child Friendly Communities

▶ Child Friendly Cities

Child Happiness

▶ Child Well-Being

Child Health and Development

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Synonyms

Child development

Definition

Child Growth and Development

Understanding growth and development is one of the most important aspects of caring for children. It permits practitioners to differentiate normal patterns of physical changes and behavior from those that are abnormal. Understanding

a child's developmental capabilities especially the child's cognitive stage can greatly improve rapport with the child and the family and will aid in explanations of potentially frightening procedures.

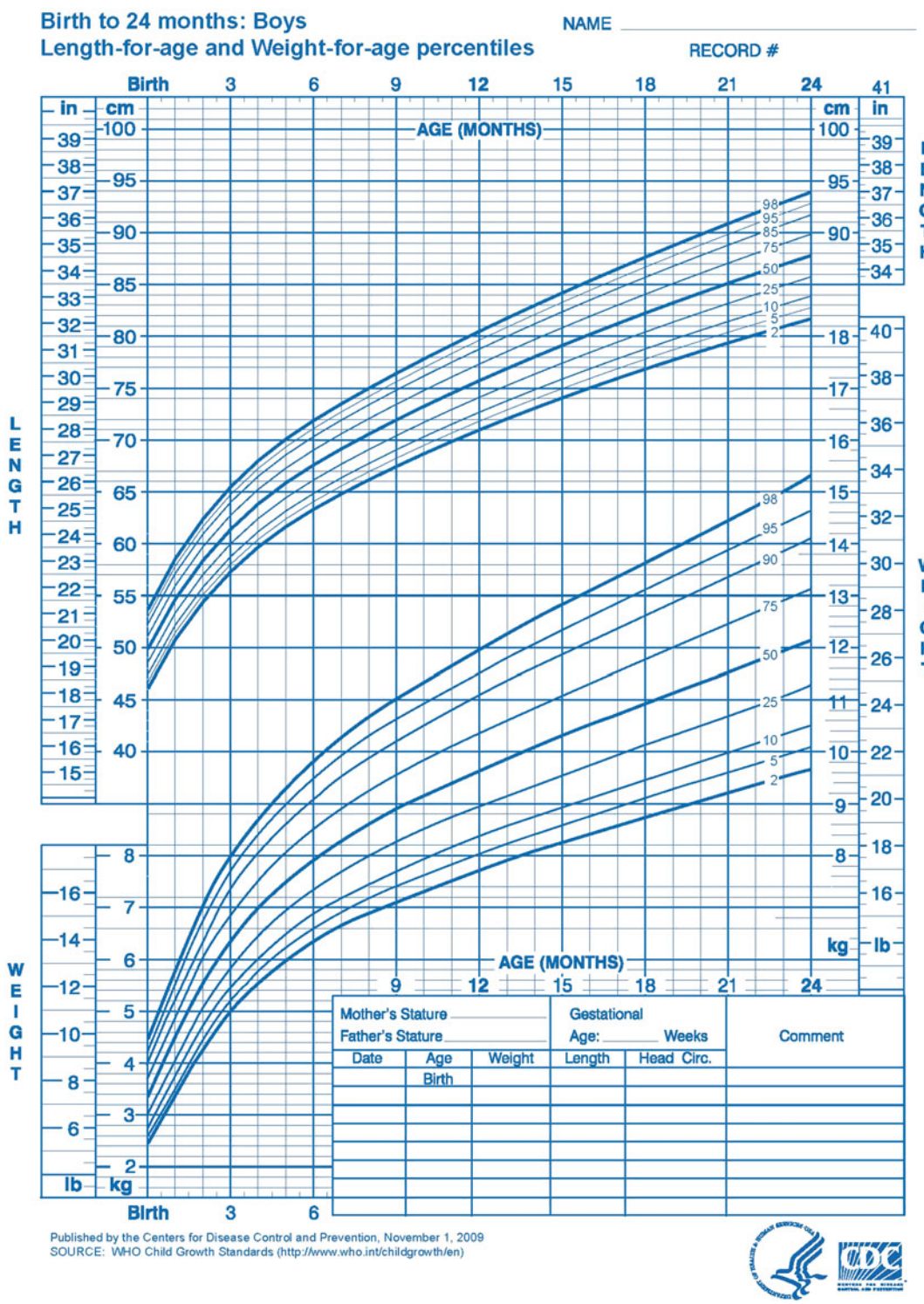
While we talk of development in terms of specific stages and attainment of specific milestones, it is important to understand that development is a continuum. Physical development and cognitive development occur in tandem and will impact each other. With each new skill attained, a new opportunity arises and thus development builds upon itself. Keep in mind that "normal" encompasses a wide range of possibilities. Many times cultural and environmental factors are as influential as the child's innate ability. The "nature vs. nurture" debate is outdated giving way to the newer "biopsychosocial" model of development. It is important to recognize that the child's environment encompasses more than the immediate family but instead includes the extended family and society to which the child belongs.

Description

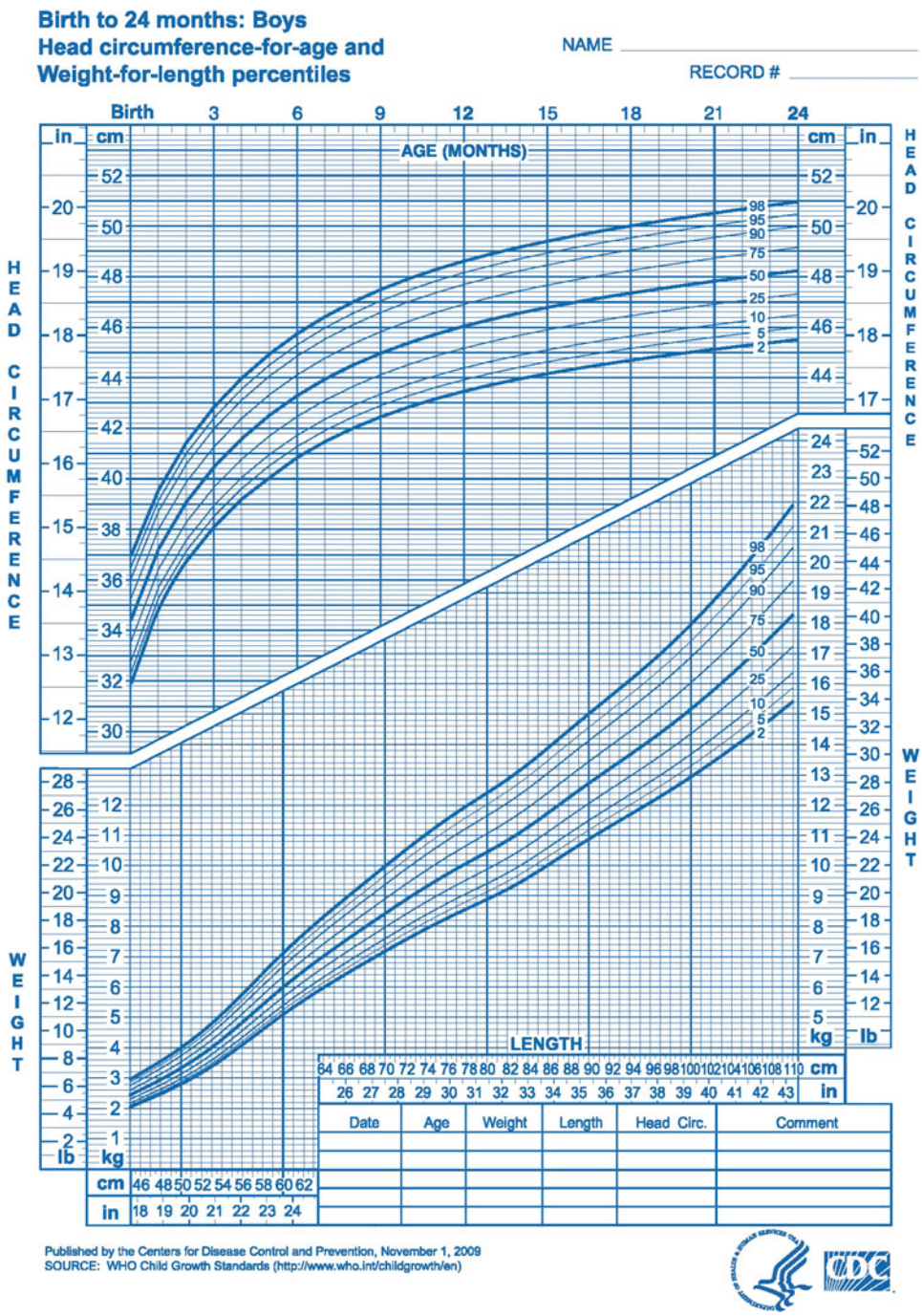
Physical Growth and Development in Children

Physical growth occurs in a predictable fashion and thus health-care providers are able to assess a child's growth in comparison to set standards. Growth charts (Figs. 1–8) are employed most frequently and are developed according to population-based data (Department of Health & Human Services, 2011).

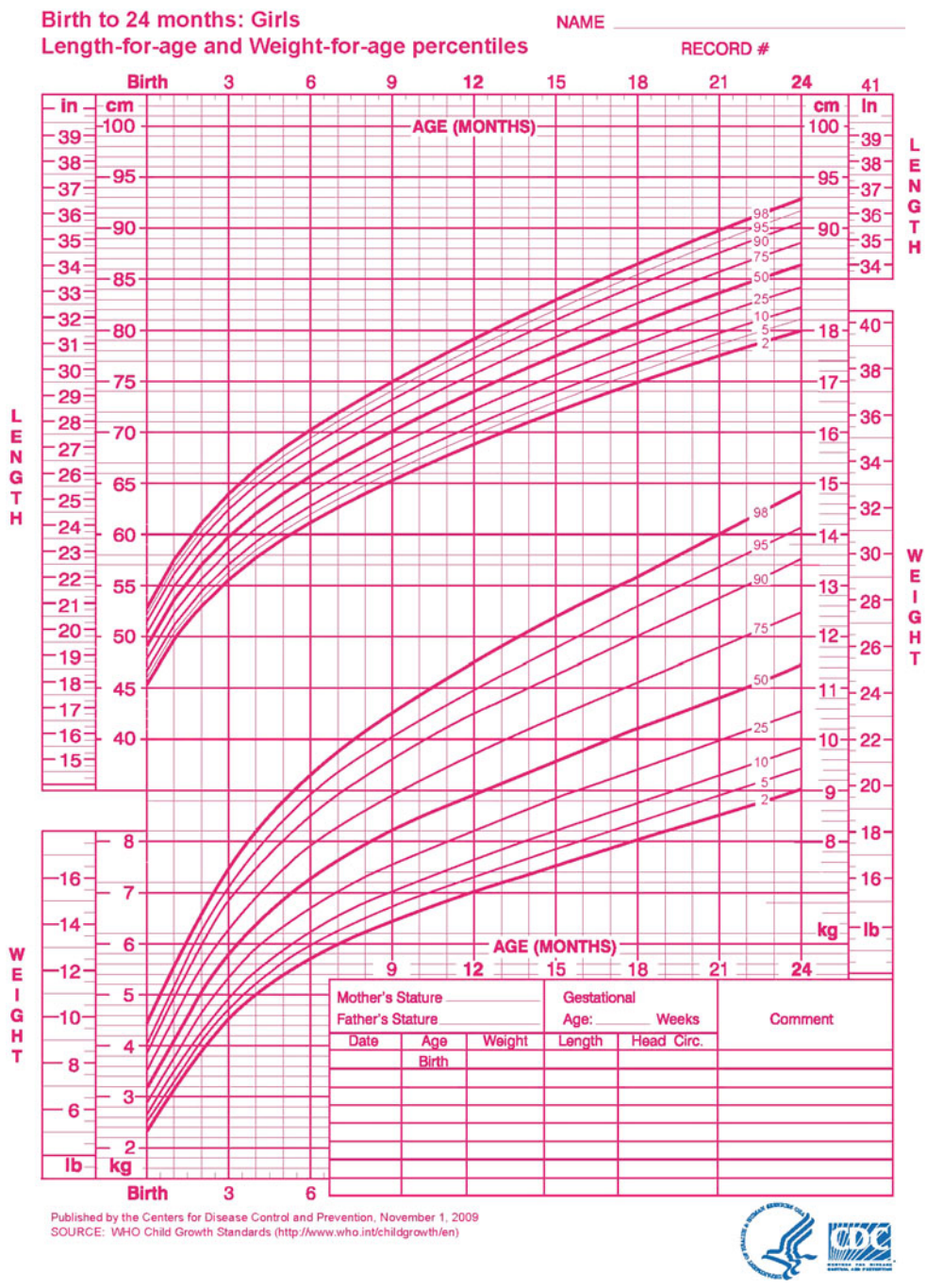
During the first week of life, newborns tend to lose up to 10 % of their body weight; however, birth weight is typically regained by 2 weeks of age. During the first month of life, infants typically gain about 30 g/day (1 oz/day) and should double their birth weight by age 4 months. Growth velocity slows over the course of the first year with infants gaining about 20 g per day from 2 to 6 months and 15 g per day from 6 to 12 months. Length is gained at a rate of about 3.5 cm per month at the beginning of the first year of life and slows to about 1.5 cm per month during the last half of the first year (Needlman, 2004). During the second year of life, growth has slowed to about 7 oz per month and length is gained at a rate of 1 cm per month. Many kids will experience an "appetite slump" due to relatively decreased caloric requirements. During the preschool years, growth velocity slows further. Preschoolers gain about 2 kg (4.5 lbs) and grow 7 cm (3 in.) per year. Their body habitus becomes leaner without the protruding abdomen and exaggerated lordosis of toddlerhood. Growth in school-age children occurs in "spurts." On average these occur 3–6 times per year and last about 2 months. School-age children gain on average 7 kg (15 lbs) and grow 6 cm (2.5 in.) per year. Pubertal development begins during this time. Adrenal production of androgens can occur as early as 6 years and can be marked by scant axillary hair growth. However, puberty is due to gonadal hormone production and is heralded by breast development in girls and testicular enlargement in boys. Breast buds typically develop in girls around age 8–13. This is followed by enlargement of the ovaries and uterus and subsequently by menses about 2–3 years after the beginning of puberty. In boys, pubertal development occurs a few years later, with average onset between 9 and 11 years, and is heralded by enlargement of the testes and penis. Pubertal development is staged using the Tanner scale which assesses pubic hair development and breast or testicular growth in girls and boys, respectively. The Tanner scale ranges from 1 (prepubertal) to 5 (full maturity). Many boys can get mild breast hypertrophy; however, most of these will resolve without intervention after 2–3 years (Needlman, 2004). The growth spurt for both boys and girls begins in early adolescence. Again girls begin and peak earlier than boys. However, peak growth velocity for both is attained around Tanner stages 3–4 (around 11.5, near the time of menses, for girls and around 13.5 for boys). Peak growth velocity is higher for boys (9.5 cm/year) than for girls (8.3 cm/year for girls.) Girls complete the growth spurt before boys (at 16 years and



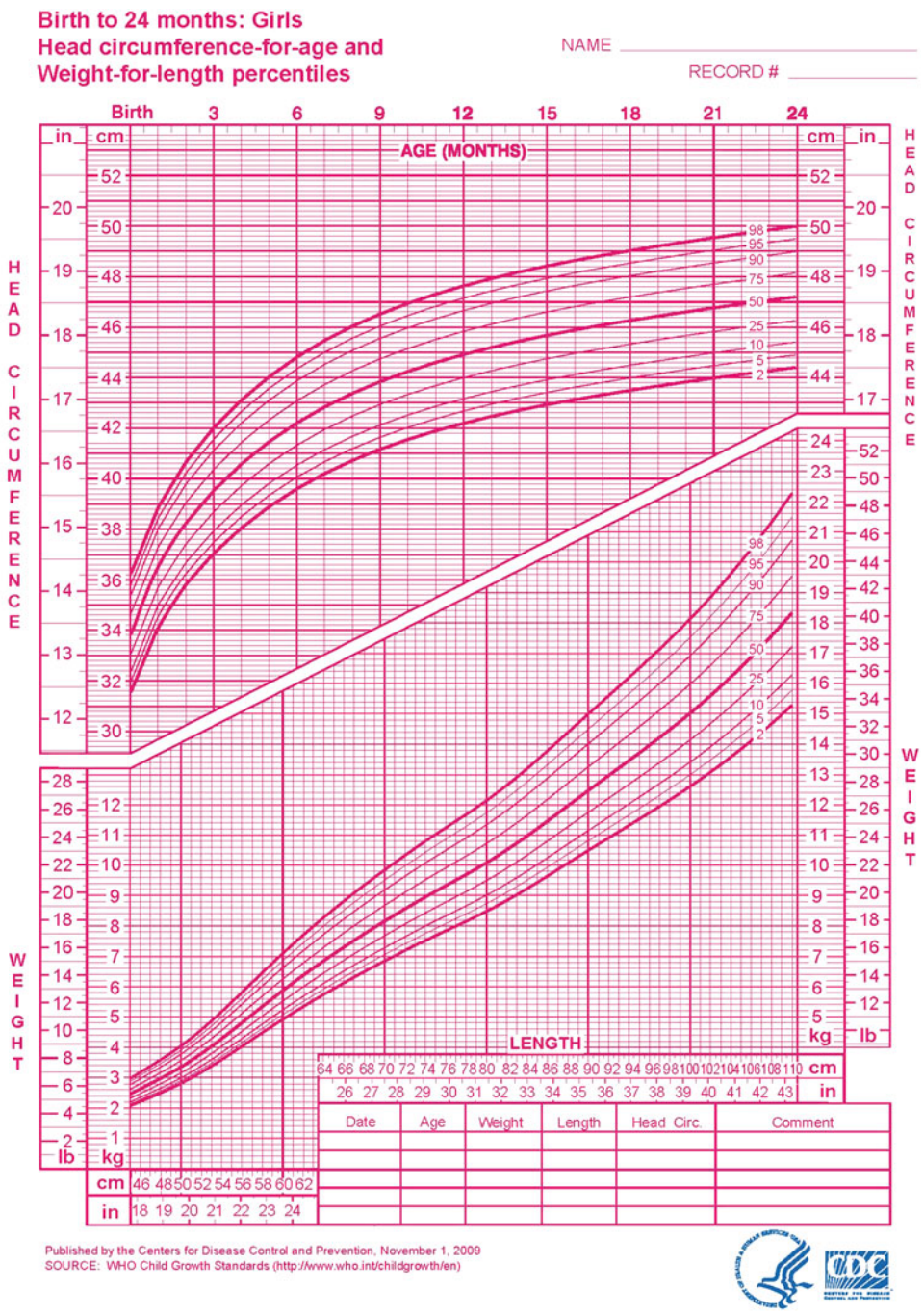
Child Health and Development, Fig. 1 Growth chart for boys: birth to 24 months; length for age and weight for age percentiles



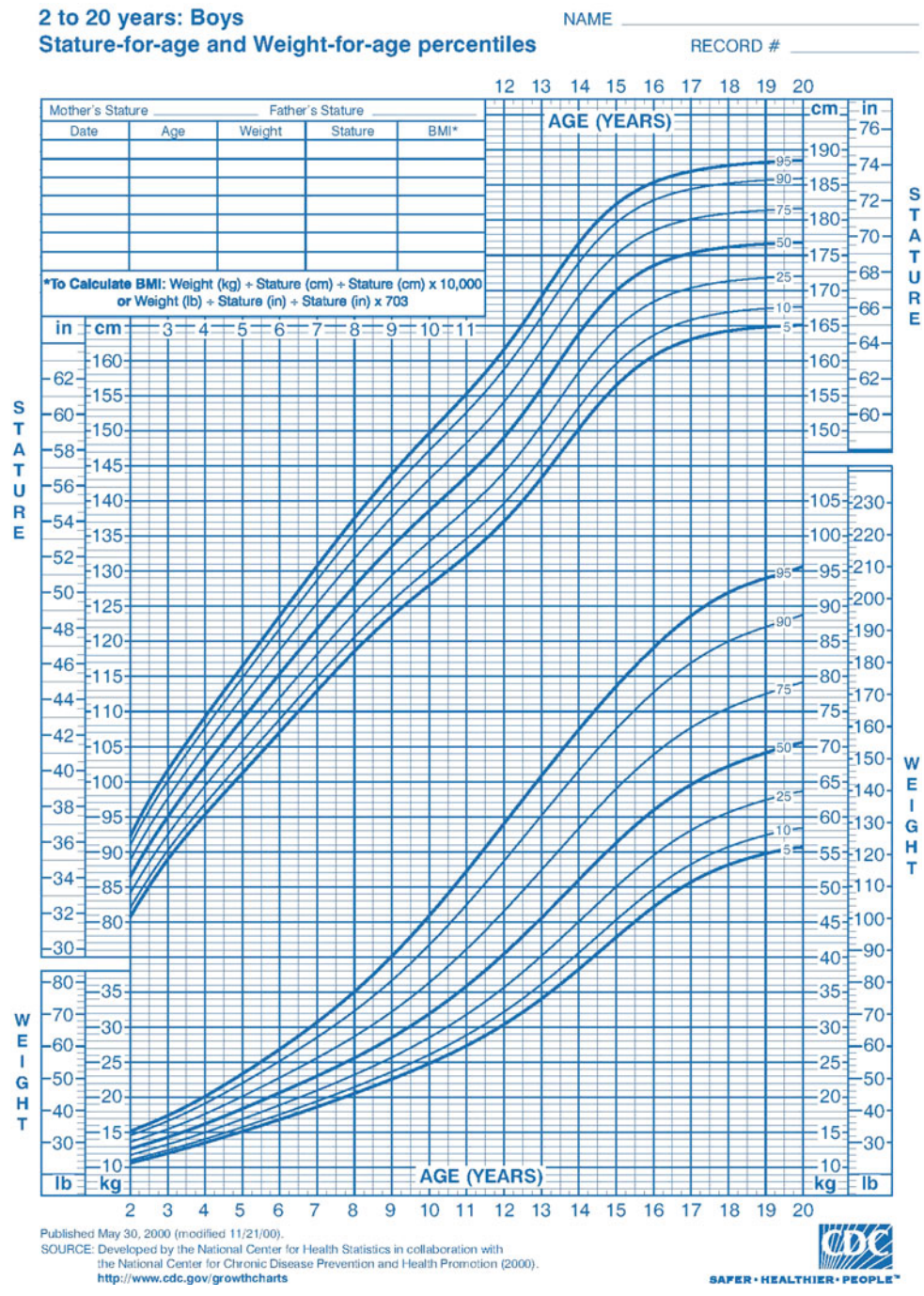
Child Health and Development, Fig. 2 Growth chart for boys: birth to 24 months; head circumference for age and weight for length percentiles



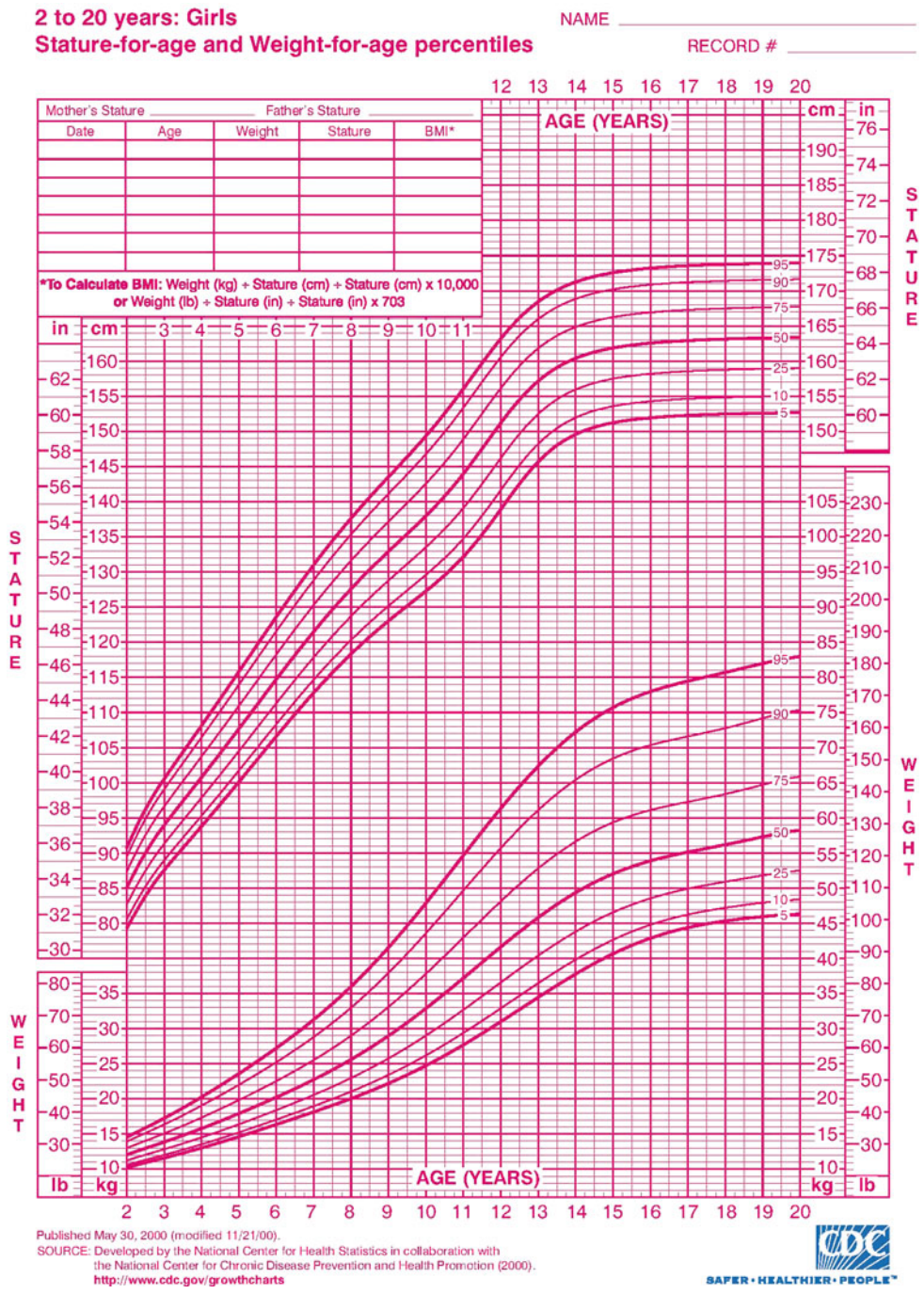
Child Health and Development, Fig. 3 Growth chart for girls: birth to 24 months; length for age and weight for age percentiles



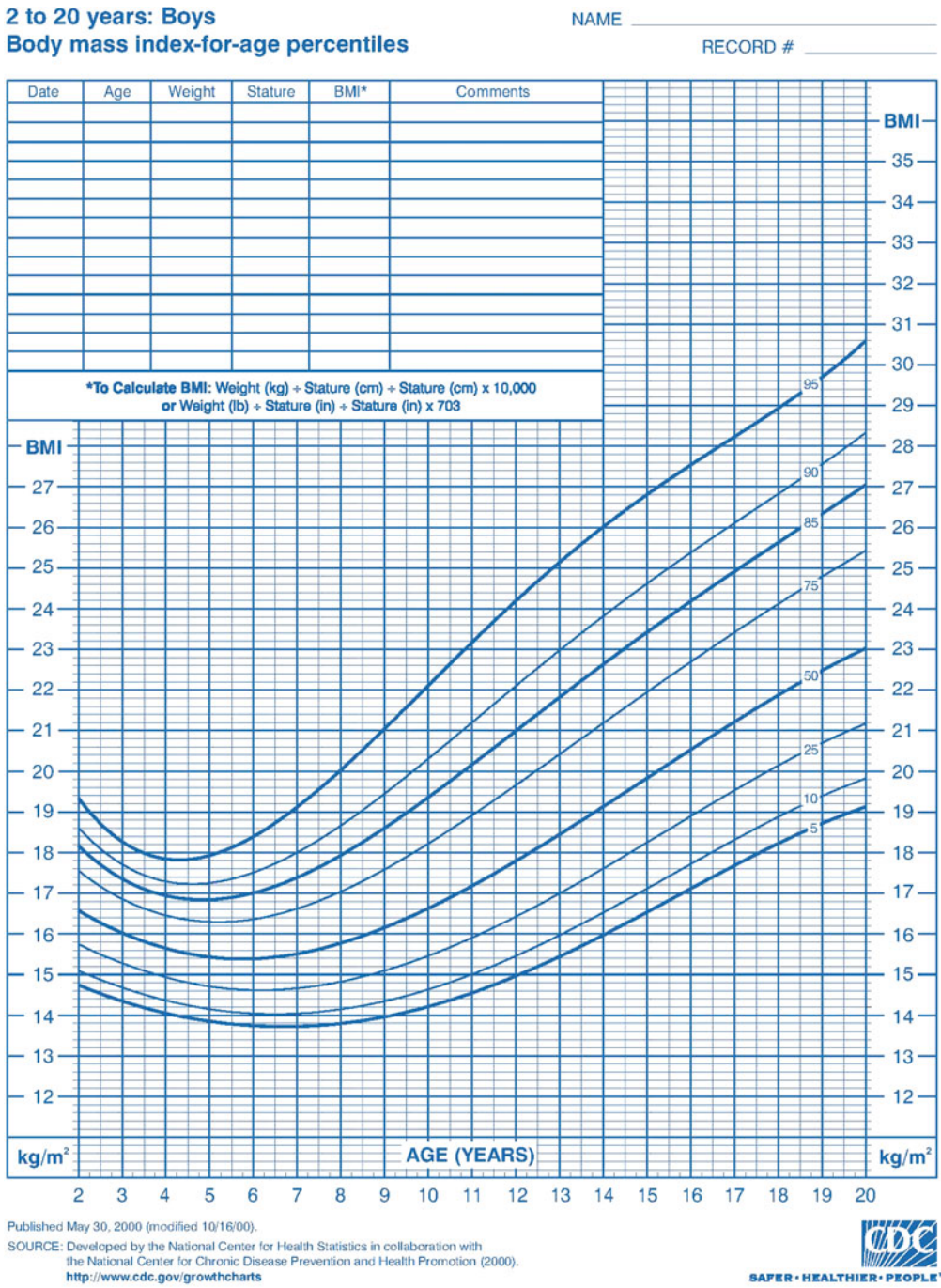
Child Health and Development, Fig. 4 Growth chart for girls: birth to 24 months; head circumference for age and weight for length percentiles



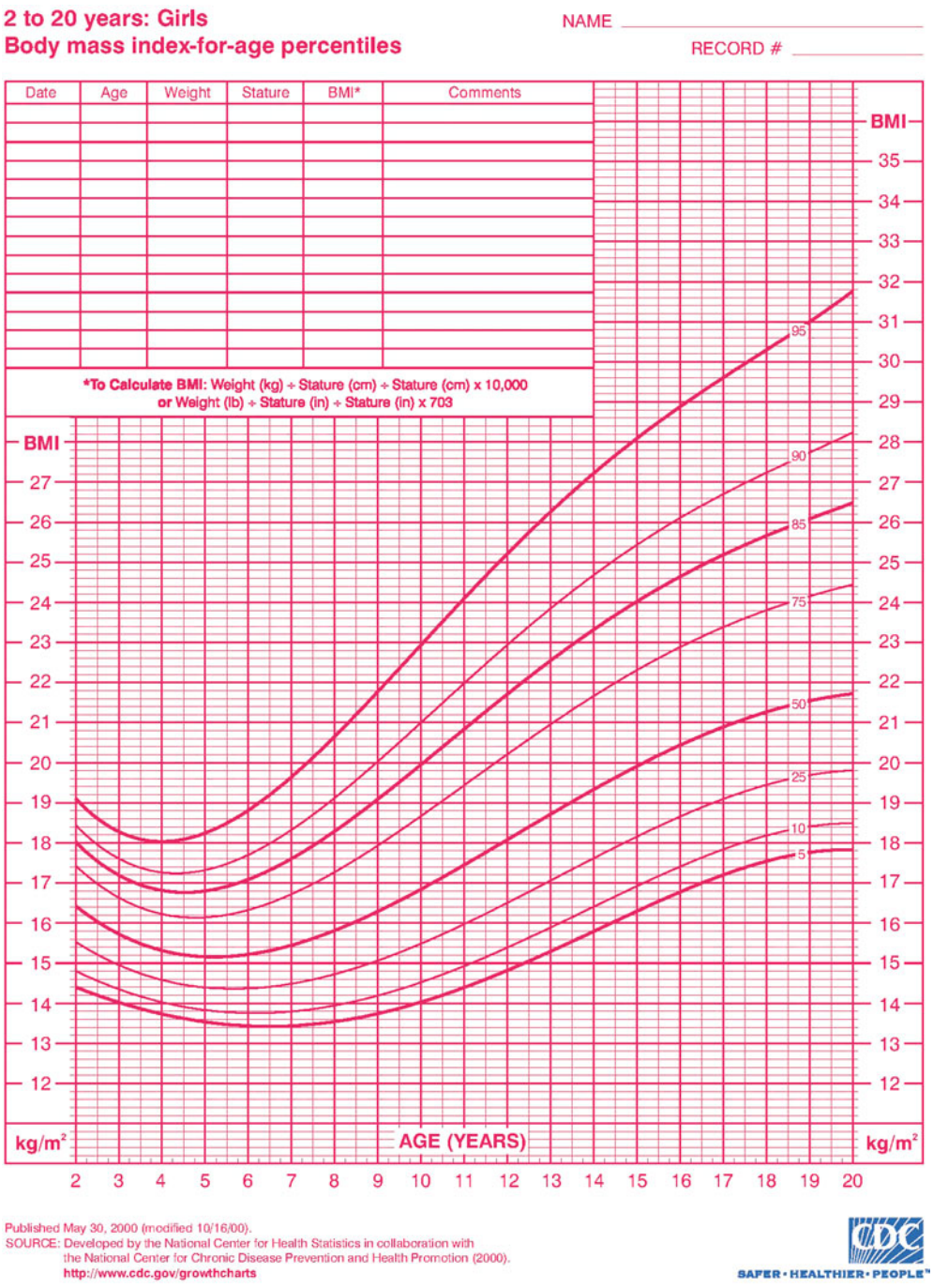
Child Health and Development, Fig. 5 Growth chart for boys: 2–20 years of age; stature for age and weight for age percentiles



Child Health and Development, Fig. 6 Growth chart for girls: 2–20 years of age; stature for age and weight for age percentiles



Child Health and Development, Fig. 7 Growth chart for boys: 2–20 years of age; body mass index for age percentiles



Child Health and Development, Fig. 8 Growth chart for girls: 2–20 years of age; body mass index for age percentiles

18 years respectively.) The adolescent growth spurt begins distally with hands and feet and subsequently involves limbs and then finally the trunk and chest. Weight gain also tends to parallel but lag behind gains in length. These factors combine to give many young adolescents an awkward appearance. Other signs of puberty include acne, axillary hair growth, facial hair and voice changes in boys, bone maturation, and increase in muscle mass and strength.

Motor Developmental Milestones

Attainment of developmental milestones also occurs in a predictable fashion. Many developmental specialists consider development to occur along "domains," including gross and fine motor, social and emotional development, and language and cognition. These are useful for discussion, but they are interrelated. Motor development progresses caudally and from proximal to distal muscles. This corresponds to continuing myelinization of nerves and cerebellar growth.

During the first few weeks of life, infants have poor control over limb movements. Over the first 2 months, gaze, head control, and coordinated suck all improve. Infants are born with "primitive reflexes" including the grasp reflex (the infant's fingers will curl around an object placed in the hand), rooting reflex (when the cheek is stroked, the infant will turn her head in the direction of the stimulus), and Moro reflex (infants will extend and adduct their arms in response to startle). Primitive reflexes begin to disappear around 3–4 months. At this time gross motor skills have improved and now babies can use both hands to hold objects midline to examine them (Levine, Cary, Crocker, & Gross, 1983; Needlman, 2004). By 4 months babies can reach for objects and are able to bring objects to their mouth. By 6 months of age, infants can roll over and by 7 months they can sit without support. Babies can reach well at this point and can transfer an object from hand to hand. During the second half of the first year fine motor skills also improve with the development of the pincer grasp around 9 months. Gross motor development also continues, with the subsequent result of increased mobility. By 8–9 months most babies are starting to crawl and pull to a stand. Many babies take their first step by 10–12 months and are walking independently by 12–15 months (Levine et al., 1983; Needlman, 2004).

During the second year of life, balance improves, enabling toddlers to be able to stoop to pick up an object (18 months), navigate stairs (crawl up stairs at 15 months, walk up with one hand held at 18 months, and walk up and down stairs at 24 months), and begin to run (18 months). Fine motor developments include scribbling, placing objects into a container, and building progressively larger towers with 3, 4, and 7 cubes at 15, 18, and 24 months respectively. Toddlers can also begin to feed themselves, initially using their fingers exclusively; however, by 24 months, they should be able to use a spoon well (Capute & Accardo, 1996).

Most children can run well by 3 years of age and can hop on one foot by 4. By 3 years children are able to climb stairs with alternating feet, jump, climb, and kick without losing their balance. Many kids begin to learn to ride a tricycle at this age and can ride a bike by age 5–6. "Handedness" is also established by age 3 and most kids have been scribbling for a year. Children can draw a circle by age 3, a square by age 4, and a triangle by age 5. By the time children reach school age, their motor skills are well developed. Fine motor coordination necessary for writing is essential for successful school entry. Overall strength and coordination will continue to improve during this time, and many children begin to participate in sports (Levine et al., 1983; Needlman, 2004).

Psychosocial Development of Children

There are multiple ways of describing a child's behavioral, emotional, and cognitive development. Similar to gains in motor skills, children develop social and cognitive skills that build on one another and enable the child to become an increasing interactive and yet autonomous individual. Similarly these developments are described in stages, although like physical

development it is important to keep in mind that these also occur on a continuum.

Many children seem to be born with a personality of their own. Some are "laid back"; some are "fussy" or "busy" or "into everything." This is referred to as temperament – an innate characteristic of the child that helps determine his or her way of responding to situations and interacting with caregivers. Components making up a child's temperament include activity level, attention span, reaction to stimuli, and the level of persistence a child devotes to tasks. It is important to realize that temperament is not necessarily permanent; a child's temperament can change over time. However, this also appears to be specific to the child, as efforts by caregivers to change temperament are not effective. Knowing about temperament can help caregivers understand their child's response to specific situations and can help predict "goodness of fit" between caregivers and the child. However, temperament is not the only factor in the child's development. Children are greatly impacted by their interactions with caregivers. Children who are well cared for and have their basic needs met are far less likely to have behavior problems later on in life. Likewise, children who are easy to care for are more likely to have positive caregiver interactions. Cognitive development is also influenced not only by the child's innate abilities but by caregivers' interactions, especially in the area of language development. Children whose caregivers frequently talk and read to them appear to have better language development (Huitt & Hummel, 2003; Huitt, 1997).

Throughout the history of child development, several theories have been proposed regarding the "driving force" behind a child's cognitive development. No one theory adequately describes the mental development of children, but consideration of the more prominent theories as well as a discussion of the skills attained by the child can give practitioners a clear picture of this fascinating aspect of the developing child. Sigmund Freud was an early thinker in this field. In Freud's theory children pass through successive stages in which ongoing development is governed by the drive to satisfy physical needs. There are four basic stages in Freud's theory. The oral stage occurs in infancy; the main goal is satisfaction through oral exploration and eating. Toddlerhood and the anal phase follow. During this time toilet training is a pervasive issue and in Freud's theory significantly impacts emotional development. The oedipal stage occurs from age 3 to 6. During this time the child develops an attachment to the parent of the opposite sex and competes with the parent of the same sex. According to Freud, this conflict can lead to fears of abandonment. Freud describes middle childhood, from 6 to 12 years, as the latent phase, where children's sexuality is dormant and does not view this as a significant stage of development. Finally in adolescence and adulthood, the main drive is sexual satisfaction. Freud's theories of child development are largely discounted today, but are important to mention because he describes child development as a series of stages that children pass through, similar to the theories of Piaget and Erikson (Huitt & Hummel, 2003; Huitt, 1997).

Erik Erikson was a student of Freud and like his mentor he also describes child development as a series of successive stages. However, he deviated from Freud, attributing the driving force not to physical needs but instead determines that development is shaped by social interaction. Each stage describes a new challenge the child will have to resolve, successfully or unsuccessfully. The first stage, "basic trust," occurs during the first year of life and is devoted to development of relationships with caregivers and to meeting basic needs. From age 2 to 3, children progress through "autonomy vs. shame and doubt." During this stage the toddler tests limits and begins to develop a sense of independence. Toddlers also begin to recognize disapproval for incorrect behavior. "Initiative vs. guilt" follows during which the preschool child (age 3–6) begins to explore his environment and develop new abilities and imagination. Guilt results from perceived failure in these areas. The school-age child, aged 6–12, progresses through "industry vs. inferiority,"

during which she begins to compare her abilities to others or to a specific standard. Finally adolescents, age 12–20, go through "identity vs. role confusion" during which they again test limits and develop a sense of self, both personally and in social situations (Huitt & Hummel, 2003; Huitt, 1997).

Jean Piaget also described stages of child development, but instead of focusing on physical needs or psychosocial challenges, he describes the cognitive development of children. Piaget described distinct stages during which the child gains new cognitive skills, thus allowing for changes in interaction with their environment and ability to problem solve. During the sensorimotor stage infants interact and learn primarily through sensation and manipulation of objects. Toddlers and preschool children progress to the preoperational stage. During this stage thinking has evolved to incorporate the use of symbols (e.g., language), but thinking is magical rather than logical. Children in this stage frequently misinterpret coincidence as cause and effect and attribute human qualities and intentions to inanimate objects. Additionally thinking is largely egocentric, meaning that children in this stage are unable to consider a point of view other than their own. Additionally rules are absolute, and blame is placed for the consequence of an action, not the intent. As school-age children progress through concrete operations, logical thought develops. Children in this stage are able to consider other points of view and their perception of cause and effect is now based on observable phenomenon. They are able to employ simple strategies and begin to enjoy games that require such. However, these children are still not able to think abstractly. Children in this phase are interested in learning and frequently will become "experts" in an area of interest (e.g., dinosaurs, rocket ships). Finally during adolescence, children enter formal operations. During this time they develop the ability to think abstractly, assimilating multiple view points. Frequently adolescents will become interested in current events, politics, and religion. They are able to consider the process of thinking and often will begin to consider the "big picture"; they will often question an established code of ethics or ponder the meaning of life.

Cognitive and Emotional Milestones

During the newborn period, the most important aspects of development are forming an attachment to adult caregivers, feeding, and regulating sleep. The newborn infant's vision is poor, with a fixed focal length of 8–12 in. However, infants have a preference for the human face. The newborn's hearing is well developed. They will turn their head to new sounds and preferentially turn to a female voice. Smiling is involuntary during the first months of life. However, by 2 months the majority of infants can make eye contact with adults and smile in response to caregivers, known as the "social smile." Babies will begin to coo at this age. Crying is normal in infants and peaks at about 6 weeks of age. During this time infants can cry from 3 to 5 h per day. Generally by age 3 months, this has tapered off, with most infants crying for a total of 1 h per day. Newborns will seek new stimuli and pay more attention to these than to that which is familiar (Huitt & Hummel, 2003; Huitt, 1997).

Between age 2 and 6 months, infants become increasingly more social. They interact more with caregivers, blow bubbles, and begin to babble and laugh. Infants during this stage will also develop different facial expressions, thus beginning to convey emotions. Additionally they will respond differently to the emotional state of their caregivers. These infants also become more inquisitive, with increasing exploration of their environment and of their own bodies. During this period, infants begin to recognize themselves as separate and different than others.

During the second half of the first year, language develops as infants continue to put consonant and vowel sounds together and eventually will say mama and dada around 9–10 months. Infants enjoy pointing to items of interest, and parents can aid in language development by labeling items and reading to their infants. The infant will usually speak his first word by age 10–12 months. Older infants also

will play games with their caregivers, such as peek-a-boo and pat-a-cake. Exploration of the environment now involves mouthing objects and banging them together. One of the most important cognitive developments during this stage is the beginning of object permanence. No longer is out of sight out of mind. When an item is hidden from view, infants will now search for that item. Increasing coordination enables self-feeding. Attachment to caregivers is now solid and infants may protest at being separated. During this time infants may also develop stranger anxiety, crying and clinging to caregivers in the presence of unknown individuals. Temper tantrums can emerge at the end of the first year and continue through toddlerhood.

Cognitive and social skills blossom for most toddlers. Children become more adept at manipulating their environment, stacking blocks, and playing with toys. They will begin to imitate older role models, acting out activities they see others do – such as talking on the phone and "feeding" a doll. Play evolves from parallel play during the second year of life to cooperative play during the early preschool years (around age 4). Toddlers are more inquisitive and willing to separate from parents more but frequently will "check in" to make sure they are still there. New people and or situations may still cause young toddlers to cling closely to parents. Cognitive functioning also develops with children learning body part's (can point to several by 15 months) and learning to follow simple commands. Most children will show affection to caregivers by giving hugs and kisses (by 15–18 months) and will seek comfort from caregivers when hurt or in trouble. Additionally by 18 months, object permanence is firmly established; toddlers begin to understand basic cause and effect and thus are able to begin to problem solve (how to obtain desired item or breach a barrier). They begin to understand rules and will attempt to self-regulate – such as telling themselves "no-no" when they want something that is off limits. This capability is minimal, however, and most toddlers may go on to "break" the rules anyway. During the second year of life, language development accelerates significantly. Toddlers begin with 2–3 words and finish with a vocabulary of at least 50 words. By 15–18 months, toddlers begin "jargoning," meaning that speech consists mostly of nonsense with the occasional real word thrown in; however, the tones and inflection imitates adult conversation. By the end of the second year, they are able to put two words together in a phrase such as "me go" or "want cookie." Additionally, toilet training is begun around 18 months; however, this takes many years and daytime control is generally not attained until 3 years. Children may not have night dryness until 4–5 years.

The preschool years are a time of rapid cognitive development. The child's vocabulary explodes to over 2000 words. During this period of time, they master multiple tenses, correct usage of pronouns, as well as many other grammatical skills. Language is an important development not only for the cognitive growth of the child but also for the emotional development as well. In this way children can express themselves, thus beginning to curtail tantrums and outbursts. Another measurement of a child's cognitive and emotional development is their play. Early on, toddlers and early preschool children (age 2–3) play independently of other children or in parallel, meaning that two or more children will play side by side, but not specifically interacting or even playing the same "game." Play initially involves reenacting everyday experiences. As children age their play becomes more interactive and imaginative. They develop "cooperative play" in which they participate in each other's activities and become able to follow a given set of rules. Imaginative play subsequently transfers from the common experience to the fantastical (e.g., traveling to a faraway place or pretending to be someone or something else.) At the end of the preschool period (age 5–6), children are able to solve puzzles and have imaginary friends. By age 5 children are also better equipped to regulate their own behavior; however, limit testing is still the main way they learn what is acceptable and what is not.

As children enter school age, they have further separation from parents; peers and other adults become much more influential in the psychosocial development of the child. Children will frequently begin spending nights away from home, either at a friend's house or at summer camp. As peer influence increases, conformity becomes more important. This can have a significant impact on self-image and self-esteem. School success can also play a role in self-esteem; especially this is the age when many learning difficulties emerge. Home interactions are still the foundation of the child's emotional and social development, and parents should still remain active in their child's life, both in and out of the school setting. Children are able to take on more responsibility and frequently take on chores around the house. Finally, play may still be fantastical at times, but will begin to involve strategy games, puzzles, and sports. As adolescence emerges, the peer group exerts ever-increasing influence and many adolescents seek an identity separate from their family. However, peer groups change frequently especially during early adolescence as the adolescent seeks to form his or her own identity. During this time the adolescent's self-concept is changing. Early on, it centered primarily on physical attributes. Later it becomes more centered on personality traits – who they are as a person. Because of the obsession with physical attributes, dieting behaviors and eating disorders can develop. Sexuality and dating emerge. Again, dating relationships are initially based on the physical in early adolescence, but later become more interpersonal as the adolescent enters young adulthood. Adolescents frequently experience angst and mood swings but can also be prone to more serious disorders such as depression. As adolescents approach adulthood, they begin to consider career goals and more long-term relationships.

Immunizations

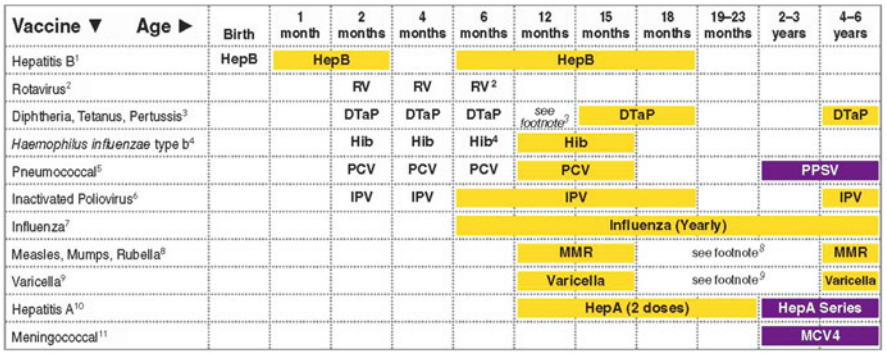
One of the most profound advances in modern medicine is the development of vaccines. Through nationwide vaccine programs, providers have been able to drastically reduce the incidence of many previously common childhood illnesses. Diseases such as polio, mumps and measles are hardly ever seen. Even chickenpox is becoming a rarity. In recent years there has been concern regarding the use of thimerosal as a preservative in vaccines and thus subsequent mercury content of vaccines and a possible association with autism. In 2001 the Institute of Medicine reviewed existing data and did not find an association between vaccines and autism. Additionally there is no strong evidence that the thimerosal preservative contributed to any neurologic disorders. However, since 2001, all of the recommended vaccines have been modified to contain no thimerosal or only trace amounts. Currently the only commonly used vaccines that contain a significant amount of mercury are influenza and the adult tetanus booster (only some formulations.) Of interest, MMR is the vaccine most blamed for autism; the MMR vaccine has never contained thimerosal (CDC 2001). In general, vaccines are safe. In previous years before the use of acellular pertussis, the DTP vaccine was associated with severe febrile reactions and a small incidence of encephalopathy. This has largely been eliminated with the new DTaP vaccine. The incidence of anaphylaxis is rare, but there is some concern for vaccines developed using chicken embryo (MMR and influenza) in people who have egg allergy. Egg anaphylaxis, not mild allergy, is a contraindication to these vaccines. The only absolute contraindication to most vaccines is anaphylaxis to that particular vaccine. Additionally live-virus vaccines (MMR, varicella) are not given to immunocompromised children. Minor illness with or without fever is not a contraindication to vaccination. However, vaccines may need to be delayed in children with more serious illness (Pickering, 2003, PP1–98).

Vaccinations are given throughout childhood according to a schedule (Figs. 9 and 10) determined by the Centers for Disease Control (CDC) and the Advisory Committee on Immunization Practices (ACIP.) The required vaccinations during childhood are as follows:

Hepatitis B: This is a series of three vaccines, the first of which is usually given during the

Recommended Immunization Schedule for Persons Aged 0 Through 6 Years—United States • 2011

For those who fall behind or start late, see the catch-up schedule



This schedule includes recommendations in effect as of December 21, 2010. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Considerations should include provider assessment, patient preference, and the potential for adverse events. Providers should consult the relevant Advisory Committee on Immunization Practices statement for detailed recommendations: **http://www.cdc.gov/vaccines/pubs/acip-list.htm**. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS) at **http://www.vaers.hhs.gov** or by telephone, **800-822-7967**. Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

1. **Hepatitis B vaccine (HepB).** (Minimum age: birth)
   At birth:
   - Administer monovalent HepB to all newborns before hospital discharge.
   - If mother is hepatitis B surface antigen (HBsAg)-positive, administer HepB and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth.
   - If mother's HBsAg status is unknown, administer HepB within 12 hours of birth. Determine mother's HBsAg status as soon as possible and, if HBsAg-positive, administer HBIG (no later than age 1 week).

   Doses following the birth dose:
   - The second dose should be administered at age 1 or 2 months. Monovalent HepB should be used for doses administered before age 6 weeks.
   - Infants born to HBsAg-positive mothers should be tested for HBsAg and antibody to HBsAg 1 to 2 months after completion of at least 3 doses of the HepB series, at age 9 through 18 months (generally at the next well-child visit).
   - Administration of 4 doses of HepB to infants is permissible when a combination vaccine containing HepB is administered after the birth dose.
   - Infants who did not receive a birth dose should receive 3 doses of HepB on a schedule of 0, 1, and 6 months.
   - The final (3rd or 4th) dose in the HepB series should be administered no earlier than age 24 weeks.
2. **Rotavirus vaccine (RV).** (Minimum age: 6 weeks)
   - Administer the first dose at age 6 through 14 weeks (maximum age: 14 weeks 6 days). Vaccination should not be initiated for infants aged 15 weeks 0 days or older.
   - The maximum age for the final dose in the series is 8 months 0 days
   - If Rotarix is administered at ages 2 and 4 months, a dose at 6 months is not indicated.
3. **Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).** (Minimum age: 6 weeks)
   - The fourth dose may be administered as early as age 12 months, provided at least 6 months have elapsed since the third dose.
4. ***Haemophilus influenzae* type b conjugate vaccine (Hib).** (Minimum age: 6 weeks)
   - If PRP-OMP (PedvaxHIB or Comvax [HepB-Hib]) is administered at ages 2 and 4 months, a dose at age 6 months is not indicated.
   - Hiberix should not be used for doses at ages 2, 4, or 6 months for the primary series but can be used as the final dose in children aged 12 months through 4 years.
5. **Pneumococcal vaccine.** (Minimum age: 6 weeks for pneumococcal conjugate vaccine [PCV]; 2 years for pneumococcal polysaccharide vaccine [PPSV])
   - PCV is recommended for all children aged younger than 5 years. Administer 1 dose of PCV to all healthy children aged 24 through 59 months who are not completely vaccinated for their age.
   - A PCV series begun with 7-valent PCV (PCV7) should be completed with 13-valent PCV (PCV13).
   - A single supplemental dose of PCV13 is recommended for all children aged 14 through 59 months who have received an age-appropriate series of PCV7.
   - A single supplemental dose of PCV13 is recommended for all children aged 60 through 71 months with underlying medical conditions who have received an age-appropriate series of PCV7.
   - The supplemental dose of PCV13 should be administered at least 8 weeks after the previous dose of PCV7. See *MMWR* 2010:59(No. RR-11).
   - Administer PPSV at least 8 weeks after last dose of PCV to children aged 2 years or older with certain underlying medical conditions, including a cochlear implant.
6. **Inactivated poliovirus vaccine (IPV).** (Minimum age: 6 weeks)
   - If 4 or more doses are administered prior to age 4 years an additional dose should be administered at age 4 through 6 years.
   - The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose.
7. **Influenza vaccine (seasonal).** (Minimum age: 6 months for trivalent inactivated influenza vaccine [TIV]; 2 years for live, attenuated influenza vaccine [LAIV])
   - For healthy children aged 2 years and older (i.e., those who do not have underlying medical conditions that predispose them to influenza complications), either LAIV or TIV may be used, except LAIV should not be given to children aged 2 through 4 years who have had wheezing in the past 12 months.
   - Administer 2 doses (separated by at least 4 weeks) to children aged 6 months through 8 years who are receiving seasonal influenza vaccine for the first time or who were vaccinated for the first time during the previous influenza season but only received 1 dose.
   - Children aged 6 months through 8 years who received no doses of monovalent 2009 H1N1 vaccine should receive 2 doses of 2010–2011 seasonal influenza vaccine. See *MMWR* 2010;59(No. RR-8):33–34.
8. **Measles, mumps, and rubella vaccine (MMR).** (Minimum age: 12 months)
   - The second dose may be administered before age 4 years, provided at least 4 weeks have elapsed since the first dose.
9. **Varicella vaccine.** (Minimum age: 12 months)
   - The second dose may be administered before age 4 years, provided at least 3 months have elapsed since the first dose.
   - For children aged 12 months through 12 years the recommended minimum interval between doses is 3 months. However, if the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid.
10. **Hepatitis A vaccine (HepA).** (Minimum age: 12 months)
    - Administer 2 doses at least 6 months apart.
    - HepA is recommended for children aged older than 23 months who live in areas where vaccination programs target older children, who are at increased risk for infection, or for whom immunity against hepatitis A is desired.
11. **Meningococcal conjugate vaccine, quadrivalent (MCV4).** (Minimum age: 2 years)
    - Administer 2 doses of MCV4 at least 8 weeks apart to children aged 2 through 10 years with persistent complement component deficiency and anatomic or functional asplenia, and 1 dose every 5 years thereafter.
    - Persons with human immunodeficiency virus (HIV) infection who are vaccinated with MCV4 should receive 2 doses at least 8 weeks apart.
    - Administer 1 dose of MCV4 to children aged 2 through 10 years who travel to countries with highly endemic or epidemic disease and during outbreaks caused by a vaccine serogroup.
    - Administer MCV4 to children at continued risk for meningococcal disease who were previously vaccinated with MCV4 or meningococcal polysaccharide vaccine after 3 years if the first dose was administered at age 2 through 6 years.

The Recommended Immunization Schedules for Persons Aged 0 Through 18 Years are approved by the Advisory Committee on Immunization Practices (**http://www.cdc.gov/vaccines/recs/acip**), the American Academy of Pediatrics (**http://www.aap.org**), and the American Academy of Family Physicians (**http://www.aafp.org**).

Department of Health and Human Services • Centers for Disease Control and Prevention

Child Health and Development, Fig. 9 Recommended Immunization Schedule for Persons Aged 0 Through 6 Years–United States 2011

Recommended Immunization Schedule for Persons Aged 7 Through 18 Years—United States • 2011

For those who fall behind or start late, see the schedule below and the catch-up schedule

Vaccine ▼ Age ►	7–10 years	11–12 years	13–18 years
Tetanus, Diphtheria, Pertussis[1]		Tdap	Tdap
Human Papillomavirus[2]	see footnote [2]	HPV (3 doses)(females)	HPV Series
Meningococcal[3]	MCV4	MCV4	MCV4
Influenza[4]	Influenza (Yearly)		
Pneumococcal[5]	Pneumococcal		
Hepatitis A[6]	HepA Series		
Hepatitis B[7]	Hep B Series		
Inactivated Poliovirus[8]	IPV Series		
Measles, Mumps, Rubella[9]	MMR Series		
Varicella[10]	Varicella Series		

Range of recommended ages for all children

Range of recommended ages for catch-up immunization

Range of recommended ages for certain high-risk groups

This schedule includes recommendations in effect as of December 21, 2010. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Considerations should include provider assessment, patient preference, and the potential for adverse events. Providers should consult the relevant Advisory Committee on Immunization Practices statement for detailed recommendations: **http://www.cdc.gov/vaccines/pubs/acip-list.htm**. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS) at **http://www.vaers.hhs.gov** or by telephone, **800-822-7967.**

1. **Tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap).** (Minimum age: 10 years for Boostrix and 11 years for Adacel)
   - Persons aged 11 through 18 years who have not received Tdap should receive a dose followed by Td booster doses every 10 years thereafter.
   - Persons aged 7 through 10 years who are not fully immunized against pertussis (including those never vaccinated or with unknown pertussis vaccination status) should receive a single dose of Tdap. Refer to the catch-up schedule if additional doses of tetanus and diphtheria toxoid–containing vaccine are needed.
   - Tdap can be administered regardless of the interval since the last tetanus and diphtheria toxoid–containing vaccine.
2. **Human papillomavirus vaccine (HPV).** (Minimum age: 9 years)
   - Quadrivalent HPV vaccine (HPV4) or bivalent HPV vaccine (HPV2) is recommended for the prevention of cervical precancers and cancers in females.
   - HPV4 is recommended for prevention of cervical precancers, cancers, and genital warts in females.
   - HPV4 may be administered in a 3-dose series to males aged 9 through 18 years to reduce their likelihood of genital warts.
   - Administer the second dose 1 to 2 months after the first dose and the third dose 6 months after the first dose (at least 24 weeks after the first dose).
3. **Meningococcal conjugate vaccine, quadrivalent (MCV4).** (Minimum age: 2 years)
   - Administer MCV4 at age 11 through 12 years with a booster dose at age 16 years.
   - Administer 1 dose at age 13 through 18 years if not previously vaccinated.
   - Persons who received their first dose at age 13 through 15 years should receive a booster dose at age 16 through 18 years.
   - Administer 1 dose to previously unvaccinated college freshmen living in a dormitory.
   - Administer 2 doses at least 8 weeks apart to children aged 2 through 10 years with persistent complement component deficiency and anatomic or functional asplenia, and 1 dose every 5 years thereafter.
   - Persons with HIV infection who are vaccinated with MCV4 should receive 2 doses at least 8 weeks apart.
   - Administer 1 dose of MCV4 to children aged 2 through 10 years who travel to countries with highly endemic or epidemic disease and during outbreaks caused by a vaccine serogroup.
   - Administer MCV4 to children at continued risk for meningococcal disease who were previously vaccinated with MCV4 or meningococcal polysaccharide vaccine after 3 years (if first dose administered at age 2 through 6 years) or after 5 years (if first dose administered at age 7 years or older).
4. **Influenza vaccine (seasonal).**
   - For healthy nonpregnant persons aged 7 through 18 years (i.e., those who do not have underlying medical conditions that predispose them to influenza complications), either LAIV or TIV may be used.
   - Administer 2 doses (separated by at least 4 weeks) to children aged 6 months through 8 years who are receiving seasonal influenza vaccine for the first time or who were vaccinated for the first time during the previous influenza season but only received 1 dose.
   - Children 6 months through 8 years of age who received no doses of monovalent 2009 H1N1 vaccine should receive 2 doses of 2010-2011 seasonal influenza vaccine. See *MMWR* 2010;59(No. RR-8):33–34.
5. **Pneumococcal vaccines.**
   - A single dose of 13-valent pneumococcal conjugate vaccine (PCV13) may be administered to children aged 6 through 18 years who have functional or anatomic asplenia, HIV infection or other immunocompromising condition, cochlear implant or CSF leak. See *MMWR* 2010;59(No. RR-11).
   - The dose of PCV13 should be administered at least 8 weeks after the previous dose of PCV7.
   - Administer pneumococcal polysaccharide vaccine at least 8 weeks after the last dose of PCV to children aged 2 years or older with certain underlying medical conditions, including a cochlear implant. A single revaccination should be administered after 5 years to children with functional or anatomic asplenia or an immunocompromising condition.
6. **Hepatitis A vaccine (HepA).**
   - Administer 2 doses at least 6 months apart.
   - HepA is recommended for children aged older than 23 months who live in areas where vaccination programs target older children, or who are at increased risk for infection, or for whom immunity against hepatitis A is desired.
7. **Hepatitis B vaccine (HepB).**
   - Administer the 3-dose series to those not previously vaccinated. For those with incomplete vaccination, follow the catch-up schedule.
   - A 2-dose series (separated by at least 4 months) of adult formulation Recombivax HB is licensed for children aged 11 through 15 years.
8. **Inactivated poliovirus vaccine (IPV).**
   - The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose.
   - If both OPV and IPV were administered as part of a series, a total of 4 doses should be administered, regardless of the child's current age.
9. **Measles, mumps, and rubella vaccine (MMR).**
   - The minimum interval between the 2 doses of MMR is 4 weeks.
10. **Varicella vaccine.**
    - For persons aged 7 through 18 years without evidence of immunity (see *MMWR* 2007;56[No. RR-4]), administer 2 doses if not previously vaccinated or the second dose if only 1 dose has been administered.
    - For persons aged 7 through 12 years, the recommended minimum interval between doses is 3 months. However, if the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid.
    - For persons aged 13 years and older, the minimum interval between doses is 4 weeks.

The Recommended Immunization Schedules for Persons Aged 0 Through 18 Years are approved by the Advisory Committee on Immunization Practices (**http://www.cdc.gov/vaccines/recs/acip**), the American Academy of Pediatrics (**http://www.aap.org**), and the American Academy of Family Physicians (**http://www.aafp.org**).

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Child Health and Development, Fig. 10 Recommended Immunization Schedule for Persons Aged 7 Through 18 Years–United States 2011

nursery visit, but may be delayed until the 2 months checkup. The second dose should be given at least 4 weeks after the first and is generally given at the 2 or 4 months check up. The third dose is given at least 16 weeks after the first dose and 8 weeks after the second dose, usually at the 6 months visit. The vaccine is formulated by a recombinant DNA technique. The main adverse reaction is pain at the site of injection.

Diphtheria, tetanus, and pertussis: This combined vaccine uses the toxoid of diphtheria and tetanus and an acellular form of pertussis. Vaccination usually occurs at the 2, 4, and 6 months series, with boosters usually given between 15 and 18 months and again at 4–5 years. Children over age 7 years receive the Td vaccine, which contains a smaller amount of the diphtheria toxoid and no pertussis. Children usually receive a Td booster at middle school entry (age 11–12) and the every 10 years after. Because of the increasing incidence of pertussis and known waning immunity in older children and adults, the FDA has recently approved a pertussis booster for adolescents (Tdap). This is expected to replace the Td booster given at age 11–12. The most common adverse events are local pain and swelling, mild to moderate fever, drowsiness, and fussiness. Seizures were reported with the old whole cell vaccine but are substantially less common with the acellular vaccine. Contraindications to the vaccine are immediate anaphylaxis and encephalopathy within 7 days after vaccination. Caution should be used in children who have seizures within 3 days after vaccination or shock, severe inconsolable crying, or fever >104.5 within 48 h after vaccination.

Haemophilus influenzae b: This is a conjugate vaccine containing a capsular polysaccharide of the bacteria. In general, children receive a series of three shots at 2, 4, and 6 months with a booster at 1–15 months. Adverse events include local pain and swelling.

Poliomyelitis: There are two formulations of this vaccine: an oral live-virus form and an intramuscular inactivated vaccine. In the USA, only the inactivated vaccine is used. Children receive their primary series at 2 and 4 months with boosters given at 6–18 months and again at 4–6 years. The inactivated vaccine is rarely associated with adverse events. Because the vaccine may contain trace amounts of streptomycin or neomycin, there is a theoretical risk of allergic reaction in sensitive individuals. Anaphylaxis would be a contraindication to the vaccine. Pregnancy is also a relative contraindication, though no adverse reactions have been reported with the inactivated vaccine.

Pneumococcus: The pneumococcal vaccine for children contains antigen from seven serotypes of *S. pneumoniae*. Children receive doses at 2, 4, and 6 months of age with a fourth dose administered between 12 and 15 months. Adverse events include local pain and swelling and a low grade fever.

Measles, mumps, and rubella: This is a live attenuated vaccine. The first dose is given between 12 and 15 months with a booster given at 4–6 years. Adverse events include fever which can occur as late as 12 days after the injection, as well as a mild rash. A rare adverse event is transient thrombocytopenia, and caution should be used in children who have had thrombocytopenia. However, this is not an absolute contraindication. Other contraindications are anaphylaxis, pregnancy, and immunocompromised individuals. Household contacts of persons with immune deficiency may still be given the vaccine.

Varicella: This also is a live attenuated vaccine. It is usually administered to children as one dose at the 12–15 months visit. Children over age 13 who receive the vaccine for the first time will need two doses at least 1 month apart. Adverse events include local soreness and occasionally fever that can occur as late as 6 weeks after the injection. About 3–10 % of children will develop a mild rash. This usually occurs within the first 2 weeks after vaccination and is mild and self-limited. In general, children with immune deficiency should not receive this vaccine nor should pregnant women.

Recently, vaccines for rotavirus, meningococcal, and human papilloma virus were also added (see Figs. 9–10).

Prevention

In order to prevent poor outcomes and deviations from normal development, it is crucial for parents to have their children attend all recommended routine checkups with a qualified health-care provider and thus also insure timely immunizations.

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Child Health in Africa

► Index of Child Health in Africa

Child Health Index of Goteborg (Northeast)

► Children's Health Index

Child Health Indicators of Life and Development (CHILD)

► Children's Health Index

Child Health Questionnaire (CHQ)

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Synonyms

Child self-report (CHQ-CF87); CHQ-PF28; Health-related quality of life (HRQOL); Infant Toddler Quality of life Questionnaire (ITQOL); Parent-completed versions (CHQ-PF50)

Definition

The Child Health Questionnaire™ (CHQ) is an internationally recognized general health-related quality of life (HRQOL) instrument that has been rigorously translated into more than 78 languages and standardized for use with children ages 5–18 to assess the child's physical, emotional, and social well-being. There is an 87-item full-length child self-report version (CHQ-CF87) with a short-form in development and two parent-completed lengths consisting of 50 and 28 items (CHQ-PF50 and CHQ-PF28, respectively).

The CHQ can be integrated with the Infant Toddler Quality of Life Questionnaire, a parent-completed generic HRQOL instrument for ages 2 months to 5 years, thereby allowing for standardized measurement across childhood. The ITQOL is available as a full-length 97 or 47-item short-form.

Description

The Child Health Questionnaire™ (CHQ) is an internationally recognized health-related quality of life (HRQOL) measurement instrument for use with children ages 5–18. There is an 87-item full-length child self-report version (child reports) (CHQ-CF87) and two parent-completed lengths consisting of 50 and 28 items (CHQ-PF50 and CHQ-PF28, respectively). The CHQ can be integrated with the Infant Toddler Quality of Life Questionnaire, a parent-completed generic HRQOL instrument for ages 2 months to 5 years, thereby allowing for standardized measurement across childhood (▶ child health and development, ▶ measurement methods). The ITQOL is available as a full-length 97- or 47-item short-form.

The Child Health Questionnaire (CHQ), developed in 1990 and initially released in 1996 (Landgraf, Abetz, Ware), represents significant scientific development spanning more than 20 years. Its conceptual framework is based on the seminal WHO definition that health and well-being are not the absence of disease but rather a state of complete physical, mental, and social well-being.

Scientific plans are underway to develop a shorter, more practical CHQ self-report version and corresponding norms and norm-based scoring for enhanced interpretation of scores. All CHQ versions/lengths measure the following child-specific constructs validated at the item and scale level: global health, general health, change in health, physical functioning, bodily pain/discomfort, limitations in school, work, and activities with friends due to physical problems and due to emotional/behavioral difficulties, behavior, mental health, self-esteem, and family cohesion. The parent-completed versions also capture time impact on the parent, emotional impact, and limitations in family activities. The item content for the CHQ can be viewed at http://www.healthactchq.com/chq.php.

Time frames for response options vary – for example, some scales ask about the past 4 weeks, the global health items ask about health "in general," and the global change items ask as compared to 1 year ago. Response options also vary from four to six levels for the scales.

Completion times can vary depending on a complex host of issues such as the setting, context, age, cognitive functioning, language, and layout. At present, the self-report youth version for ages ten and older is 87 items, and completion times can vary from 16 to 25 min. Both lengths of the parent version (50 and 28 items) can be completed in 10–15 min and 5–10 min, respectively.

▶ Health-Related Quality of Life Questionnaire Readability. Readability (reported in the 2008 User Manual) using the Flesch-Kincaid readability estimates indicate that the CHQ-PF50 is understandable for 80 % of the people at a reading level of grade 3.5, 80 % at grade 3.2 for the PF28, and 85 % at grade 2.5 for the CHQ-CF87. Note, however, that these estimates take into account the content of the form only and not the layout.

Using rigorous international guidelines, both lengths of the parent-completed CHQ have been translated in more than 78 languages including those for India, Africa, and Asia. There are 25 translations for the CHQ-CF87. New translations are ongoing and are updated as they become available using the following link: http://www.healthactchq.com/chq-t.php.

The CHQ has been licensed for use in more than 90 unique conditions/diseases with leading pharmaceutical firms, hospitals, researchers, allied health professionals, and clinicians. Use of the CHQ requires registration and approval for licensure (http://www.healthactchq.com/registration.php). Ongoing scientific work for the CHQ is supported exclusively by license fees including a separate nominal charge for small unfunded, academic studies.

Psychometric Properties. There are more than 450 available peer-reviewed publications demonstrating the extensive reliability and validity of the CHQ across a vast array of conditions including ADHD/ADD, AIDS/HIV, anxiety/stress/trauma, ▶ asthma, autism, cancer, cerebral palsy, CNS, developmental delay, diabetes, cystic fibrosis, D-transposition of the arteries, end-stage renal failure, epilepsy, germ-cell tumors, hemophilia, juvenile rheumatoid arthritis, Kawasaki disease, scoliosis, obesity, and spine deformity and transplantation. A CHQ-specific bibliography, searchable by condition and other parameters, is available using the following link: http://www.healthactchq.com/bibliographies.php.

Using traditional, well-regarded multi-item scaling methods, items in the CHQ-PF50 and CHQ-PF28 were tested across 26 subgroups and reported in the User Manual. Groups included a US representative sample and five seminal clinical groups (▶ asthma – including a large HMO sample and data from two separate clinical trials, attention deficit hyperactivity disorder (ADHD), cystic fibrosis, juvenile rheumatoid arthritis, and children being treated for a psychiatric condition). The CHQ-CF87 was tested and validated at the item and scale level across a school-based sample and four clinical groups (attention deficit hyperactivity disorder, cystic fibrosis, and end-stage renal disease). Known-group validity findings were reported in the User Manual and in a Landgraf and Abetz (1997) peer-reviewed publication.

Item scaling tests (▶ item analysis) included item internal consistency, ▶ item discriminant validity, internal consistency reliability, and floor/ceiling effects. Detailed item scaling results and further empirical evidence with regard to reliability and validity were extensively documented in the first and second printings of the CHQ User Manual (1996 and 1999) and reported for the Australian adaptation in Waters, Wright, Wake, Landgraf, and Salmon (1999), Canadian-French, German, and United Kingdom translations in Landgraf et al. (1998), Dutch translation in Raat, Botterweck, Landgraf, and Hoogeveen (2005), Swedish translation in Norrby, Nordholm, and Fasth (2003), and across 32 countries in Ruperto et al. (2001).

▶ Reliability. As noted in the CHQ User Manual, 91 % of the internal consistency reliability estimates (▶ Cronbach's alpha) for the CHQ-PF50 in the US representative sample and across all child subgroups (gender and five age groups) were 0.70 or higher (median, 0.84; range, 0.66–0.94). Across the nine parent subgroups (e.g., ethnicity, education, work status, gender), 82 % of the estimates met the requirement for group-level comparison (median, 0.84; range, 0.65–0.91). In six of the 10 clinical samples and related subgroups, 86 % or more of the observed alpha coefficients met or exceeded the minimum standard (0.70). The median ▶ Cronbach's alpha coefficient ranged from 0.69 in HMO asthma sample to 0.89 in the psychiatric sample. For the PF28, five of the eight scales exceeded 0.74 (median 0.75). Estimates for the CHQ-CF were consistently above 0.83 and ranged from 0.73 to 0.97 with nine of the 10 scales exceeding the 0.70 threshold across the school-based sample and four clinical groups.

Validity. Detailed findings supporting the discriminant validity of the CHQ (i.e., ability to detect meaningful differences) were documented in the User Manual. Mean scores were lowest and highest as hypothesized for the US sample and benchmark conditions (asthma, ADHD, JRA, epilepsy) with F-statistics (index of the magnitude of discriminant validity) for all scales being very significant statistically ($p < 0.000$). Standard errors were consistent across all scales for the clinical samples and the US normative sample. Factor structure (i.e., ▶ construct validity) for the CHQ was supported using several factor analytic (▶ factor analysis) methods and is also reported in detail in the User Manual and by others (Drotar, Schwartz, Palermo, & Burant, 2006; Ferro, Landgraf, & Nixon-Speechly, 2013; Hepner and Sechrest 2002). Validity for the CHQ-PF50 and PF28 (▶ convergent validity, ▶ construct validity, ▶ criterion validity, ▶ known-groups validity, mutual ▶ concurrent

validity, ▶ predictive validity, and ▶ responsiveness to change) has also been reported by numerous others across a wide array of conditions and settings. Validity findings for the CHQ-CF87 were published in Kurtin, Landgraf, and Abetz (1994), Landgraf and Abetz (1997), and Raat, Landgraf, Bonsel, Gemke, and Essink-Bot (2002). More detailed validity findings for the CHQ-PF50 and PF28 are reported in the User Manual and for the CHQ-PF50, CHQ-PF28, and CHQ-CF87 in peer-review publications across a wide array of conditions.

Further information regarding the reliability and validity of the CHQ can be found in the User Manual and by accessing the search function on the Bibliography Tab for the CHQ website http://www.healthactchq.com/bibliographies.php.

Summary Scoring and ▶ Norms. A hallmark feature of the parent-completed CHQ is versatility in scoring and the availability of US-based norms and clinical benchmarks for enhanced interpretation of scores. The CHQ Profile Score provides scores for each of the independent health concepts as captured by multi-item scales – for example, physical functioning, limitations in school, self-esteem, mental health, and family functioning. Due to the varying length of response options for the different scales (e.g., 4, 5, or 6 levels), raw scale scores are standardized using a 0–100 continuum with a higher score indicating higher health-related quality of life (i.e., better functioning and well-being). In both lengths of the parent-completed versions, individual scale scores can be summarized into a two-component score – the CHQ Physical Summary and the Psychosocial Summary – which represent the underlying validated framework of the measure. Detailed empirical evidence supporting the two-component scoring based on ▶ factor analysis for the CHQ-PF50 and CHQ-PF28 summaries are documented in the User Manual. Summary scoring options will be explored for the child self-report CHQ as part of ongoing scientific development. These efforts will be conducted in concert with development of a short-form and US-based norms.

In April 2008, the CHQ Scoring and Interpretation Manual was made available exclusively for Licensed Users in an interactive CD format which features hyperlinks in both the Table of Contents and the Appendix of Tables for smooth navigation. Users can also click on URLs within the Manual to access the latest updates on translations and the online Bibliography at the HealthActCHQ website. For ease of use and given the wide adoption, acceptability, and publications using the CHQ, the streamlined third printing of the User Manual eliminates item scaling findings. It provides information about the conceptual framework and development of the CHQ-PF50, PF-28, and CF-87, scoring, reliability coefficients, the proprietary scoring algorithms, norms and rules for interpretation including confidence intervals and sample size estimates needed to detect 2–20 point differences in both scale and summary scores for the CHQ-PF50 and PF28 between two experimental groups and post intervention measures, group means and a fixed norm, and two experimental groups post intervention. In addition to US norms, the Manual also includes benchmarks for several disease/condition groups and is distributed to single users as part of a paid license only.

Further information about the CHQ or the ITQOL can be obtained at http://www.healthactchq.com/.

Cross-References

- ▶ Asthma
- ▶ Attention-Deficit/Hyperactivity Disorder (ADHD)
- ▶ Ceiling Effect
- ▶ Child Health and Development
- ▶ Construct Validity
- ▶ Convergent Validity
- ▶ Criterion Validity
- ▶ Cronbach's Alpha
- ▶ Diabetes Mellitus Type 1
- ▶ Discriminant Validity
- ▶ Factor Analysis

- ▶ Floor Effect
- ▶ Health-Related Quality of Life Questionnaire Readability
- ▶ Index of Child Health in Africa
- ▶ Item Analysis
- ▶ Item Discriminant Validity
- ▶ Known-Groups Validity
- ▶ Measurement Methods
- ▶ Norms
- ▶ Predictive Validity
- ▶ Reliability
- ▶ Responsiveness to Change
- ▶ Translating Health Status Questionnaires/ Outcome Measures

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Child Indicators and Neighborhood Safety

- ▶ Neighborhood Characteristics and Children's Safety

Child Indicators Research

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Definition

Research and statistics that create measures and/or indicators for monitoring the state of children, and the study of these measures in order to promote children's ▶ well-being and influence policies. Its overall goal is enhancing the understanding of children's life and the improvement of their quality of life.

Description

The use of statistical data to specifically study the well-being of children dates back to the first half of the twentieth century, as pioneering "State of the Child" reports were published during the 1940s (Ben-Arieh, 2006; Ben-Arieh & Goerge, 2001). Nevertheless, most researchers would agree that the current field of child well-being indicators has its substantial origins in the "▶ social indicators movement" of the 1960s. This movement was based on a notion among social scientists and public officials that accurately measured and consistently collected social indicators could provide a way to monitor the condition of groups in society, including the conditions of children and families (Aborn, 1985; Land, 2000). Alongside this movement, the call for accountability-based public policy and the rapid changes in family life and structure have also prompted an increased demand for a better picture of children's life and well-being (Ben-Arieh & Wintersberger, 1997; Casas, 2000; Lee, 1997).

The rational for measuring the state of children independently of the state of society stems from the notion that children are a unique and separate population group (Qvortrup, 1994). Under this view, children are seen as active constructors of their surrounding (Prout & James, 1990), and childhood is not considered only as a transient phase but also as a permanent social category (Qvortrup, 2002). Support for this notion, as well as for the need to develop social indicators of the state of children, can be found in the development of the children's rights concept. This concept includes, by its nature, acceptance of the autonomy of children as well as the "fact" that a child is an individual human being (Casas, 1997), all aspects explicitly articulated in the UN Convention on the Rights of the Child (CRC).

The publication of UNICEF "State of the World's Children," an annual report on children's basic life conditions, their survival, and development (published since 1979), has also contributed to the growing global awareness for the need to monitor the state of children. This was supported by the creation of various regional and local initiatives, such as the "European Childhood Project" and the "Kids Counts" project, aiming to specifically and quantitatively describe the situation of children (Miljeteig, 1997).

In the late 1980s and early 1990s, several attempts to collect data on children led to a common conclusion that children were not "visible" in industrialized countries' systems of social accounting (Adamson, 1995). The answer in statistical language was simple: There was a need for children to become the unit of observation (Jensen & Saporiti, 1992). Changing the data collection focus allowed the creation of child-specific indicators, for the use of child advocacy groups, policymakers, researchers, the media, and service providers.

In the last 20 years, a rapid development and evolution of child indicators occurred. Within this movement, nine main trends can be identified and considered as the main grounds on which the field is based today.

First, while in the past much attention has been paid to children's physical survival and basic needs (Ben-Arieh, 2000; Bradshaw,

Hoscher, & Richardson, 2007), recent indicators are more inclusive of child well-being, promoting different aspects of child development (Aber, 1997; Pittman & Irby, 1997). Second, indicators have shifted from being primarily focused on negative outcomes to a focus also on positive outcomes. As the measures of risk factors or negative behaviors are not the same as measures that gauge protective factors or positive behaviors (Aber & Jones, 1997), the challenge became developing indicators that hold societies accountable for more than the safe warehousing of children and youth (Pittman & Irby, 1997). Third, the emphasis on "well-becoming," that is, indicators that predict subsequent achievements or well-being, has been complemented by indicators of current "well-being," neglecting the former forward-looking perspective that postponed children's "good life" until adulthood (De Lone, 1979).

Fourth, the move from a focus on objective descriptions in which usually adult serve as a proxy for children's status to efforts which consider the child's perspective and search for a subjective view of childhood is apparent (Casas, González, Figuer, & Coenders, 2004; Mareš, 2006). A fifth shift that can be recognized is that current indicators incorporate a ▶ children's rights perspective. Children's well-being is normally focused on what is desired, but rights monitoring addresses legally established minimums (Ben-Arieh et. al., 2001). Then as a result of the former trends, a sixth shift happened. While early indicators were derived from "traditional" domains of child well-being, primarily those determined by professions or by a social service (i.e., education, health, foster care), recent indicators are emerging from new domains that cut across professions (Ben-Arieh, 2000).

The seventh shift refers to the change in the geographical focus. While early indicators were usually looking at national geographic units, recent indicators are measured at a variety of geographical units. Understanding that communities and neighborhoods are the context of children's well-being made it clear that collecting and analyzing data cannot be considered an exclusively national or governmental responsibility, and thus local and regional reports are multiplying (Coulton, Korbin, & McDonell, 2009). Eighth, efforts to develop various ▶ composite indices of children's well-being are dramatically increasing. The growing supply of information led to calls for a single summary index that will capture the circumstances of children. Such composite index might facilitate easier assessment of progress or decline to hold policymakers accountable for and make it simple to follow trends across demographic groups and local areas (UNICEF, 2007). Finally, there is an evident shift toward policy-oriented efforts in the development of indicators (Granger, 2006; Klein, 2006; O'Hare, 2008) that might enable them to better mobilize activities and resources across agency and organizational boundaries (Hogan, 2006).

While child indicators research is an emerging field in the context of social indicators, it is definitely maturing and getting more organized. What started in the last third of the twentieth century through a number of international and national projects was (see, e.g., http://multi-national-indicators.chapinhall.org or Ben-Arieh et al., 2001; Hauser et al., 1997; Qvortrup, 1994) developed in 2006 to the International Society for Child Indicators (ISCI) (www.childindicators.org) and the publication of the Child Indicators Research journal.

Discussion

Research that focus on children, and actively involve them, raises some unique questions that have been the object of constant debates in field. One of these questions regards the validity and reliability of children. However, ample studies have shown that children are a credible source of information, even from an early age (Borgers, Hox, & Sikkel, 2004; Davis, 2007; Muris, Meesters, & Fijen, 2003; Ronen, Streiner, Rosenbaum & The Canadian Pediatric Epilepsy Network, 2003). Another issue concerns the

appropriate methods to be used in research with children. Researchers have to adapt their methods to children of various ages (Qvortrup, 2002), and the practices employed in the research need to be in line with children's experiences, interests, values, and everyday routines (Christiansen & Prout, 2002). Finally, there is the need to attend for ethical considerations, dealing with aspects such as the informed consent of the child and children's vulnerabilities.

The growing quantity of "State of the Child" reports is in itself an indicator of the growing field. Indeed, between 2000 and 2005, twice as many reports were published than in the entire decade of the 1980s. However, this growth is not universal. While the growth in the number of such reports may be nearing its peak in the West, it only started in the non-Western and non-English-speaking countries, where the phenomenon of State of the Child reports is still relatively new. Moreover, studies have found that most of the State of the Child reports are a one-time episode. Long-standing periodicals reports that might be scientifically powerful are still much scarcer. Lastly, most of the reports in the field are still in national and local level (Ben-Arieh, 2006). Comprehensive international research, especially one that includes ▶ subjective indicators, is still quite rare (Casas, 2011).

Cross-References

- ▶ Child Rights
- ▶ Composite Indices
- ▶ Indicators, Quality of Life
- ▶ Social Indicators Movement
- ▶ Subjective Indicators
- ▶ Well-Being

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Child Labor in Urban India

► Laboring Boys in Urban India

Child Living Standards

► Child Poverty

Child Maltreatment

► Child Maltreatment: Physical Abuse

Child Maltreatment and Parents' Adoption Satisfaction

► Parental Satisfaction and Child Maltreatment

Child Maltreatment: Neglect

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Synonyms

Abandonment; Lack of care, children; Maltreatment of children; Negligence of children

Definition

Although neglect is the most common type of child maltreatment, the definition of neglect is both elusive and controversial. Generally, neglect is viewed as the failure to provide for the basic needs of a child or protect a child, either through specific acts of a caregiver or the failure to act by a caregiver. Basic needs of children are most often defined as adequate shelter, food, health care, protection, and nurturance; adequate is usually interpreted as sufficient enough to prevent harm or the risk of harm (Dubowitz, Black, Starr & Zuravin, 1993). The identification of neglect is shaped by societal understandings of minimal standards of care, appropriate actions or inactions of caregivers, and whether the caregiver's neglectful behavior is intentional. The threshold for determining neglect is based on how often the acts occur (chronicity) and how harmful or potentially harmful the neglect is to the child (severity). The child's age and vulnerability are also considered, with higher standards of care expected for younger children, especially infants, or children with special needs. Specific forms of child neglect include failure to provide adequate supervision or protection, permitting criminal behavior, physical neglect, medical neglect, failure to provide treatment for psychological or psychiatric issues, abandonment, and educational neglect. Definitions of neglect may vary depending on one's personal and professional orientation and on whether the definition is conceptualized from a legal, medical, psychological, child welfare, or community perspective (Erickson & Egeland, 2011; Tyler, Allison & Winsler, 2006).

Difficulties arise when trying to address the influence of socioeconomic factors. Concern is often expressed that neglect is a manifestation of impoverished living conditions rather than avoidable failures to care. While most families living in poverty are not neglectful, it is clear that the stresses associated with poor socioeconomic conditions can diminish the healthy functioning and abilities of parents (Dubowitz et al., 1993). Poor living conditions can also increase the likelihood that caregivers will experience alcohol and drug addictions, poor physical health, few social supports, poor family functioning, stress, and domestic violence. There is great concern that families from disadvantaged populations are penalized by child welfare authorities because children are exposed to conditions that are beyond the control of their caregivers. It is important to consider individual caregivers and children in the context of their environments when defining neglect, in order to account for the influence of community and societal factors on the ability of parents to care for their children (Dubowitz et al., 1993). Children who are neglected may suffer deficits in several areas including their health and physical development, intellectual and cognitive growth, emotional and psychological well-being, and social and behavioral development.

Description

History

Neglect was first identified as a problem within a historical time period characterized by social and economic deprivation (Swift, 1995). Key aspects of neglect are evident in the English Poor Law of 1601, which acknowledged that the public had a responsibility to assist with the care of people who could not care for themselves.

The children who were of public concern fell into four categories: (1) children of the street, (2) young offenders, (3) children who worked in factories, and (4) children looked after by the poor-law authorities. It is only these categories of children that warranted government intrusion into the family unit (Mcintyre, 1993). Concerns about neglected and abandoned children were cumulated with industrialization in North America, with middle class reformers focusing their efforts on improving parenting through a case work approach (Swift, 1995).

In 1934, an amendment to the Infants Act in British Columbia named "the ameliorating of family conditions that lead to the neglect of children" as one of the children's aid society's duties (Mcintyre, 1993). Today, most North American child welfare legislation recognizes that the children who have been neglected or are at significant risk of harm as a result of neglectful behaviors by the caregiver(s) are in need of protection.

Prevalence

It is difficult to estimate the true prevalence of child neglect. Neglect is often considered to be an understudied or neglected topic in the child maltreatment literature (Allin, Wathen & MacMillan, 2005; Tang, 2008; Wolock & Horowitz, 1984). Officially reported child abuse and neglect statistics likely reflect an underestimate of its prevalence. Three sources of data will be reviewed in order to provide an understanding of the prevalence of child neglect in North America: the National Child Abuse and Neglect Data System (NCANDS), the National Incidence Study (NIS), and the Canadian Incidence Study of Reported Child Abuse and Neglect (CIS).

The NCANDS, a federally sponsored data collection system in the United States, collects and analyzes data on child abuse and neglect each year (U.S. Department of Health & Human Services, 2011). Of all victims of maltreatment tracked by NCANDS in 2010, 78 % were neglected. Sadly, cases of neglect, as with other forms of maltreatment, can be fatal. Of the children who died as a result of maltreatment tracked by the NCANDS, 68 % suffered neglect either exclusively or in combination with another maltreatment type.

The National Incidence Study (NIS) provides up-to-date estimates of the incidence of child abuse and neglect in the United States (Sedlack et al., 2010). The NIS includes information on children who were investigated by child protection services and also other children who were recognized as maltreated by community professionals but not reported to or investigated by child protection services. The NIS definitions measure maltreatment that has been perpetrated by a parent or caregiver and uses two standards to assess abuse and neglect: the *harm standard* and the *endangerment standard*. For neglect, children were counted under the *harm standard* if they were seriously harmed by neglectful caregiving. In the NIS-4 (2005–2006), 771,700 children were identified for neglect under the *harm standard*, a rate of 10.5 per 1,000 children. This represents a marginally significant increase in the incidence of *harm standard* neglect from the NIS-2 (1986). The *endangerment standard* includes all children who met the *harm standard* and, in addition, includes children who were endangered by maltreatment but had not yet experienced harm. In the NIS-4 (2005–2006), 2,251,600 children were identified for concerns of neglect under the *endangerment standard*, a rate of 30.6 per 1,000 children. This represents a significant increase from the NIS-2 (1986), in which 917,200 children were identified for *endangerment standard* neglect, a rate of 14.6 per 1,000 children.

The Canadian Incidence Study of Reported Child Abuse and Neglect, 2008 (CIS-2008), is a national study that collected information from child protection workers in every province and territory across Canada about their initial investigations of maltreatment-related concerns. Of all maltreatment investigations that were substantiated in Canada in 2008, 34 % focused on neglect, a rate of 4.81 per 1,000 children (Trocmé et al., 2010). Most substantiated investigations tracked by the CIS-2008 focused on either neglect (34 %) or exposure to intimate partner violence (34 %). Although physical harm was noted in 6 % of investigations where neglect was the primary form of substantiated maltreatment, most of

these cases involved injuries that were severe enough to require medical treatment. The CIS-2008 findings indicate that there were more victims of neglect requiring medical treatment (0.18 investigations per 1,000 children) than for any other category of maltreatment. Emotional harm was identified in 30 % of investigations in which neglect was the primary form of substantiated maltreatment, and in 18 %, harm was severe enough to require treatment. The findings also suggest that neglect was often chronic. In 68 % of cases where neglect was the primary form of substantiated maltreatment, neglect occurred over multiple incidents.

The Identification of Neglect

There are various ways in which neglectful caregiving may be identified. Children and caregivers may directly seek assistance or may indirectly signal their need for help (Daniel, Taylor & Scott, 2010). Intervention approaches are likely most effective when addressing the multifaceted contributors to child neglect, at the family, community, and policy levels (Tyler et al., 2006). When working with families struggling with neglect, practitioners may consider incorporating strategies such as job training and housing assistance with more individualized efforts such as mental health or substance use counseling (Wilson & Horner, 2005). Research has not yet found any intervention to be effective in preventing the recurrence of neglect; however, certain interventions focused on children and parent child interactions show promise for addressing the consequences of neglect (MacMillan et al., 2009).

Cross-References

- ▶ Child and Family Well-being
- ▶ Child Health and Development
- ▶ Child Maltreatment: Physical Abuse
- ▶ Child Maltreatment: Psychological Maltreatment
- ▶ Child Maltreatment: Sexual Abuse
- ▶ Child Poverty
- ▶ Early Childhood Development (ECD)

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Child Maltreatment: Physical Abuse

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Synonyms

Child battery; Child maltreatment; Child physical assault; Punitive violence against children; Violence against children

Definition

Child physical abuse is the use of physical force by an adult in an attempt to coerce, exercise power over, or punish a child. It takes place around the world in homes, schools, care institutions, detention centers, prisons, places of work, and on the streets. Most often, it occurs within families. In some cases, such as female genital cutting and dowry-related violence, it reflects traditional cultural practices. But its most common motivation is punishment, as in the case of honor killings, spousal violence against child brides, and striking children for noncompliance. Force may be applied in many ways: slapping, smacking, spanking, and beating; pulling ears or hair; pinching; shaking; hitting with objects; burning, stabbing, and strangling; or forcing children to engage in strenuous exercise, hold uncomfortable positions, retain body wastes, or ingest foul-tasting substances. Physical punishment is often used to enforce children's submission to other forms of maltreatment, such as sexual abuse and commercial sexual exploitation, and their use as soldiers and laborers. It also may be used to punish children for reporting sexual abuse or for seeking help for family problems. Physical abuse is often intended to humiliate or otherwise psychologically abuse the child.

Description

History

The physical abuse of children has existed in all cultures and throughout history, but its recognition as a valid focus of research is very recent. Dr. Henry Kempe and his colleagues (1962) are credited with bringing parental abuse of children to world attention as a major social problem in the 1960s. The vast majority of research sparked by Kempe's work has been conducted in Western cultures and has focused on abuse by parents. In the 1960s, this research was carried out primarily within the medical community and focused on psychiatric disturbance as an explanation for parental violence. The 1970s brought critiques of this approach as overly simplistic, as sociologists began to identify patterns of sociodemographic characteristics, such as poverty and low educational levels, among abusive parents (Gelles, 1973). But soon it was discovered that, although economic stress can precipitate violence, the physical abuse of children exists in all social strata. David Gil (1973) expanded the sociocultural lens to include broader issues, such as attitudes about power, inequality, and physical punishment.

In the 1980s, emerging theoretical models placed child physical abuse within a complex human ecological system that included risk and protective factors at the individual, family, community, and societal levels (e.g., Belsky, 1980; Bolton, 1988; Wolfe, 1987). These factors included levels of preparation for parenting, life stress, quality of the spousal relationship, social support, parental knowledge and beliefs, conditioned anger, coercive family patterns, and availability of community programs and services. Increasingly, research was exposing the role of attitudes toward physical punishment; most incidents of physical abuse were occurring within a disciplinary context by parents who believed that their violence was justified by the child's behavior (Kadushin & Martin, 1981). Interventions were aimed at improving parents' anger and stress management skills, shifting their attributions for children's behavior, and enhancing family support. However, debates continued about

the level of violence that remained acceptable in the case of children, and researchers continued to operationally define "abuse" as acts distinct from "ordinary" punishment.

The 1990s witnessed a global shift in conceptions of violence against children from a family issue to a human rights violation. The United Nations (UN) *Convention on the Rights of the Child* (CRC), adopted by the UN General Assembly in 1989, redefined violence against children as a global issue and its elimination as a moral absolute. Recognizing children as persons in their own right, the CRC identified them as meriting protection from violence equal to that enjoyed by adults. In doing so, the CRC challenged the special status that had previously been afforded to parents, teachers, guardians, and other adults granting them the right to inflict violence on children if they deemed it to be justified. The human rights perspective on child physical abuse is rapidly changing conceptualizations and definitions of child physical abuse. Rather than defining abuse on the basis of the degree of injury sustained, the caregiver's intent, or cultural norms, this perspective defines abuse as the violation of a child's right to physical security and dignity – and it recognizes the role of social structures, norms, and traditions in its perpetuation (Durrant & Smith, 2011).

The CRC also identified violence against children as a government responsibility; it obligates ratifying states to take "all appropriate legislative, administrative, social and educational measures to protect the child from all forms of physical or mental violence" (Article 19). This treaty has been ratified by all nations of the world, except for the United States and Somalia. Its impact is being seen globally. For example, the 1999 *African Charter on the Rights and Welfare of the Child* obligates nations to "eliminate harmful social and cultural practices affecting the welfare, dignity, normal growth and development of the child and in particular: (a) those customs and practices prejudicial to the health or life of the child; and (b) those customs and practices discriminatory to the child on the grounds of sex or other status" (Article 21). Thirty countries have explicitly prohibited all physical punishment of children on the basis that it violates children's rights to protection and dignity. For example, Venezuela's *Law for the Protection of Children and Adolescents* (2007) states, "all children and young people have a right to be treated well. This right includes a non-violent education and upbringing, based on love, affection, mutual understanding and respect, and solidarity. All forms of physical and humiliating punishment are prohibited" (Article 32-A). The first country to prohibit all physical punishment of children was Sweden in 1979, but the list now includes developed and developing countries from almost all regions of the world (Finland, 1983; Norway, 1987; Austria, 1989; Cyprus, 1994; Denmark, 1997; Latvia, 1998; Israel, Germany, Bulgaria, 2000; Iceland, 2003; Hungary, Ukraine, 2004; Romania, 2005; Greece, 2006; Netherlands, Portugal, Uruguay, Spain, Venezuela, New Zealand, 2007; Costa Rica, Moldova, 2008; Luxembourg, 2009; Liechtenstein, Kenya, Tunisia, 2010; South Sudan, 2011).

Prevalence

The true prevalence of physical violence against children is impossible to know. In countries without child protection systems, no mechanisms exist for recording violence against children or investigating reports. In countries with child protection systems, prevalence is estimated on the basis of police and/or child welfare reports. Some countries have developed systematic surveillance systems. For example, the Canadian Incidence Study of Reported Child Abuse and Neglect (CIS) estimates that 17,212 reports of child physical abuse were substantiated in 2008 (Public Health Agency of Canada, 2010). The National Child Abuse and Neglect Data System (NCANDS) in the United States recorded 123,599 reports of physical abuse in 2009 (US Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau, 2010). UNICEF's Multiple Indicator Cluster Survey found that, across 37 countries, two-thirds of children experience physical punishment (UNICEF, 2009).

But reported cases unquestionably underestimate prevalence rates because children may be

too young or afraid to make reports themselves – and adults may not see visible signs, may not want to interfere in others' family affairs, may fear reprisals or stigma, or, perhaps most importantly, view punitive violence as non-abusive. The UN World Report on Violence against Children (Pinheiro, 2006) revealed that child physical abuse exists on a scale that we are only beginning to grasp.

Cross-References

- ▶ Child Maltreatment: Psychological Maltreatment
- ▶ Child Maltreatment: Sexual Abuse
- ▶ Child Sexual Abuse
- ▶ Child Soldiers
- ▶ Dating Violence
- ▶ Domestic Violence
- ▶ Elder Abuse
- ▶ Social-Ecological System(s)
- ▶ Violence Against Women

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Child Maltreatment: Psychological Maltreatment

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Synonyms

Emotional abuse; Emotional abuse and neglect; Emotional maltreatment; Psychological abuse and neglect of children

Definition

Child maltreatment: Psychological maltreatment (PM) is one of the four main forms of parental/caregiver abuse of children. Establishing a consensus, research-supported definition took almost two decades of work (e.g., Baily & Baily, 1986; Brassard, Hart, & Hardy, 1993; Garbarino, Guttman, & Seely, 1986; Hart & Brassard, 1986, 1989–1991; Hart, Germain, & Brassard 1987). This research culminated in the 1995 *Guidelines for Psychosocial Evaluation of Suspected Psychological Maltreatment of Children and Adolescents*, published by the American Professional Society on the Abuse of Children (APSAC). The guidelines begin with a broad definition: "'Psychological maltreatment' means a repeated pattern of caregiver behavior or extreme incident(s) that

convey to children that they are worthless, flawed, unloved, unwanted, endangered, or only of value in meeting another's needs" ([American Professional Society on the Abuse of Children] APSAC, 1995, p. 2). The *Guidelines* define six subtypes of PM (see Table 1) that must be accompanied by a high likelihood of harm or actual emotional/psychological harm to the child to be considered PM. The *Guidelines* provide guidance in the assessment of both PM behaviors and harm. The APSAC definitions of PM have been subjected to empirical validation (Binggeli et al., 2001; Brassard & Donovan, 2006; Burnett, 1993; English & LONGSCAN Investigators, 1997; Kairys & Johnson, 2002; Portwood, 1999; Trickett, Mennen, Kim, & Sang, 2009; Wright, 2008).

Description

Prevalence

Because the nature of PM is psychological as opposed to physical, this form of maltreatment is widely underreported. Data collected from the Fourth National Incidence Study of Child Abuse and Neglect (NIS-4) indicate that psychological abuse occurs in 2 out of every 1,000 children using a standard of evidence of harm and occurs in 4.1 out of every 1,000 children if a standard of endangerment is used (Sedlak et al., 2010). The incidence for psychological neglect is 2.6 and 15.9, respectively. However, this data includes a sampling of cases reported to Child Protective Services and by mandated reporters. Telephone surveys conducted by the Family Research Laboratory at the University of New Hampshire, which utilized a representative sample of American parents and inquired about parent–child conflicts, indicate that 90 % of American parents had engaged in psychological aggression during the previous 12 months (Straus & Field, 2003). Worldwide, there is evidence that PM parenting practices are common as well (Dunne et al., 2009; Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002; Runyan, Dunne, & Zolotor, 2009; Zolotor et al., 2009). Based on the NIS-4 data, children from low-income families are psychologically abused five times more frequently and psychologically neglected four times more frequently than those in higher-income families. Children living with one biological parent and a partner are psychologically abused 10 times and psychologically neglected 12 times more than those living with both biological parents. White and Black children are psychologically abused more than Hispanic children, and Black children are more psychologically neglected than White children. Children with confirmed disabilities living in households (and not in institutions) are psychologically neglected at more than twice the rate of children without confirmed disabilities under the harm standard. However, they are 1.7 times less likely to be psychologically neglected than nondisabled children under the endangerment standard.

Impact

Research indicates that the negative impact of PM is as severe as other forms of abuse (see Hart et al., 2011, and Brassard & Donovan, 2006, for recent reviews of impact). Children who are psychologically abused are more likely to have an impaired sense of self and see others as antagonistic. PM is associated with damaging effects on intrapersonal thoughts, feelings, and behaviors such as low self-esteem, anxiety, depression, negative emotional or life view, other negative cognitive styles, and suicide or suicidal thoughts. PM has also been shown to damage children's emotional health, including emotional instability, problems with impulse control, emotional unresponsiveness, borderline personality, self-harm, substance abuse, and eating disorders. PM is related to interpersonal problems and social competency problems such as insecure or disorganized patterns of attachment, antisocial behavior, self isolation, problems showing empathy and sympathy to others, social phobia, noncompliance, sexual maladjustment, aggression, violence, dating violence, delinquency, and criminality. In addition, PM has deleterious effects on children's learning, leading to lower academic achievement, lower measured intelligence, learning impairments,

Child Maltreatment: Psychological Maltreatment, Table 1 Psychological Maltreatment Forms

Six major types of psychological maltreatment are described below and further clarified by identification of subcategories

A repeated pattern or extreme incident(s) of the conditions described in this table constitute psychological maltreatment. Such conditions convey the message that the child is worthless, flawed unloved, endangered, or only valuable in meeting someone else's needs.

Spurning (Hostile Rejecting/Degrading) includes verbal and nonverbal caregiver acts that reject and degrade a child. *Spurning* includes the following:

- Belittling, degrading, and other nonphysical forms of overly hostile or rejecting treatment
- Shaming and/or ridiculing the child for showing normal emotions such as affection, grief, or sorrow
- Consistently singling out one child to criticize and punish, to perform most of the household chores, or to receive fewer rewards
- Public humiliation

Exploiting/Corrupting includes caregiver acts that encourage the child to develop inappropriate behaviors (self-destructive, antisocial, criminal, deviant, or other maladaptive behaviors). *Exploiting/Corrupting* includes the following:

- Modeling, permitting, or encouraging antisocial behavior (e.g., prostitution, performance in pornographic media, initiation of criminal activities, substance abuse, violence to or corruption of others)
- Modeling, permitting, or encouraging developmentally inappropriate behavior (e.g., parentification, infantalization, living the parent's unfulfilled dreams)
- Encouraging or coercing abandonment of developmentally appropriate autonomy through extreme overinvolvement, intrusiveness, and/or dominance (e.g., allowing little or no opportunity or support for child's views, feelings, and wishes; micromanaging child's life)
- Restricting or interfering with cognitive development

*Terrorizing*includes caregiver behavior that threatens or is likely to physically hurt, kill, abandon, or place the child or child's loved ones or objects in recognizabley dangerous situations. *Terrorizing* includes the following:

- Placing a child in unpredictable orchaotic circumstances
    - Placing a child in recognizably dangerous situations
- Setting rigid or unrealistic expectations with the threat of loss, harm, or danger if they are not met
- Threatening or perpetrating violence against the child
- Threatening or perpetrating violence against a child's loved ones or objects

Denying Emotional Responsiveness (Ignoring) includes caregiver acts that ignore the child's attempts and needs to interact (failing to express affection, caring and love for the child) and shown no emotion in interactions with the child. *Denying Emotional Responsiveness* includes the following:

- Being detached and uninvolved through either incapacity or lack of motivation
- Interacting only when absolutely necessary
- Failing to express affection, caring and love for the child

Isolating includes caregiver acts that consistently deny the child opportunities to meet needs for interactng or communicating with peers or adults inside or outside the home. *Isolating* includes the following:

- Confining the child or placing unreasonable limitations on the child's freedom of movement within his or her environment
- Placing unreasonable limitations or restrictions on social interactions with peers or adults in the community

Mental Health, Medical, and Educational Neglect includes unwarranted caregiver acts that ignore, refuse to allow, or fail to provide the necessary treatment for the mental health, medical, and educational problems or needs for the child. *Mental Health, Medical, and Educational Neglect* includes the following:

- Ignoring the need for, failing, or refusing to allow or provide treatment for serious emotional/behavioral problems or needs of the child
    - Ignoring the need for, failing, or refusing to allow or provide treatment for serious physical health problems or needs of the child
        - Ignoring the need for, failing, or refusing or allow or provide treatment for services for serious educational problems or needs of the child

Source: Hart, S. N., & Brassard, M. R. (1991, 2001). Definition of physchological maltreatment. Indianapolis: Office for the Study of the Psychological Rights of the Child; Indiana University School of Education

and impairment in moral reasoning. Lastly, PM has adverse effects on physical health, including respiratory ailments, failure to thrive, somatic complaints, hypertension, and delays in physical and behavioral development. There is evidence that certain adverse effects may be associated with specific subtypes of PM. In a study utilizing a sample of university students, terrorizing predicted anxiety and somatic complaints, ignoring predicted symptoms of depression and borderline personality disorder characteristics, and degradation predicted borderline personality characteristics (Allen, 2008).

PM has been shown to have different effects on children at various stages of development. In infants and toddlers, psychological abuse is associated with attachment insecurity and significant internalizing and externalizing behaviors (Erickson, Egeland, & Pianta, 1989; Dubowitz, Papas, Black, & Starr, 2002). Psychologically abused preschoolers demonstrate problems with noncompliance and are less persistent in their approach to learning (Erickson et al., 1989). Preschoolers who have been psychologically abused and neglected demonstrate higher rates of aggression and fighting (Manly et al., 2001). In middle childhood, PM predicts social-emotional problems (Herrenkohl, Herrenkohl, Egolf, & Wu, 1991), interpersonal problems (Vissing, Strauss, Gelles, & Harrop, 1991), delinquency, and aggression (Vissing et al., 1991). Adolescents are at a higher risk of being diagnosed with conduct disorder if they were psychologically maltreated in childhood (Egeland, Yates, Appleyard, & van Dulman, 2002). As adolescence is a time of transition and a pivotal time in the development of self concept, a negative view of self and interpersonal problems associated with PM interfere with healthy identity development (Donovan & Brassard, 2011).

Prevention and Treatment

Although no evidence-based prevention or treatment programs have been designed to directly target PM and evidence-based parenting programs for community and maltreating families contain limited content on PM (Baker et al., 2011), treatments for other types of maltreatment may be effective, especially since PM is typically a component of other forms of abuse and neglect. Parenting programs with evidence for efficacy with maltreating families include Parent–Child Interaction Therapy (PCIT) (Hembree-Kigin & McNeil, 1995); The Incredible Years Basic plus Advance Series with training modules for parents, teachers, and students (Webster-Stratton, 2001); Functional Family Therapy (Alexander & Parsons, 1982); and Pathways Triple P (Sanders, Markie-Dadds, & Turner, 2003). For adults, schema-focused therapy, designed to address early maladaptive schema arising from maltreatment, is a promising treatment (Young, Klosko, & Weishaar, 2003). It was effective in treating borderline personality disorder (95 % had childhood PM) in a multicenter, randomized 2-group design in the Netherlands (Giesen-Bloo, et al., 2006).

Psychological Maltreatment Forms

A repeated pattern or extreme incident(s) of the conditions described in this list constitutes PM. Such conditions convey the message that the child is worthless, flawed, unloved, endangered, or only valuable in meeting someone else's needs.

Spurning (hostile rejecting/degrading) includes verbal and nonverbal caregiver acts that reject and degrade a child. *Spurning* includes:

- Belittling, degrading, and other nonphysical forms of overtly hostile or rejecting treatment
- Shaming and/or ridiculing the child for showing normal emotions such as affection, grief, or sorrow
- Consistently singling out one child to criticize and punish, to perform most of the household chores, or to receive fewer rewards
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- Modeling, permitting, or encouraging antisocial behavior (e.g., prostitution, performance in pornographic media, initiation of criminal activities, substance abuse, violence to or corruption of others)

- Modeling, permitting, or encouraging developmentally inappropriate behavior (e.g., parentification, infantilization, living the parent's unfulfilled dreams)
- Encouraging or coercing abandonment of developmentally appropriate autonomy through extreme overinvolvement, intrusiveness, and/or dominance (e.g., allowing little or no opportunity or support for child's views, feelings, and wishes; micromanaging child's life)
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Terrorizing includes caregiver behavior that threatens or is likely to physically hurt, kill, abandon, or place the child or child's loved ones/objects in recognizably dangerous situations. *Terrorizing* includes:

- Placing a child in unpredictable or chaotic circumstances
- Placing a child in recognizably dangerous situations
- Setting rigid or unrealistic expectations with threat of loss, harm, or danger if they are not met
- Threatening or perpetrating violence against the child
- Threatening or perpetrating violence against a child's loved ones or objects

Denying Emotional Responsiveness (ignoring) includes caregiver acts that ignore the child's attempts and needs to interact (failing to express affection, caring, and love for the child) and showing no emotion in interactions with the child. *Denying Emotional Responsiveness* includes:

- Being detached and uninvolved through either incapacity or lack of motivation
- Interacting only when absolutely necessary
- Failing to express affection, caring, and love for the child

Isolating includes caregiver acts that consistently deny the child opportunities to meet needs for interacting/communicating with peers or adults inside or outside the home. *Isolating* includes:

- Confining the child or placing unreasonable limitations on the child's freedom of movement within his/her environment
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Mental Health and Medical and Educational Neglect include unwarranted caregiver acts that ignore, refuse to allow, or fail to provide the necessary treatment for the mental health, medical, and educational problems or needs for the child. *Mental Health and Medical and Educational Neglect* include:

- Ignoring the need for, failing, or refusing to allow or provide treatment for serious emotional/behavioral problems or needs of the child
- Ignoring the need for, failing, or refusing to allow or provide treatment for serious physical health problems or needs of the child
- Ignoring the need for, failing, or refusing to allow or provide treatment for services for serious educational problems or needs of the child

Source: Hart, S. N., & Brassard, M. R. (1991, 2001). Definition of psychological maltreatment. Indianapolis: Office for the Study of the Psychological Rights of the Child; Indiana University School of Education.

Cross-References

- ▶ Child Maltreatment: Neglect
- ▶ Child Maltreatment: Physical Abuse
- ▶ Child Maltreatment: Sexual Abuse
- ▶ Child Rights
- ▶ Dating Violence
- ▶ Delinquency
- ▶ Domestic Violence

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Child Maltreatment: Sexual Abuse

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Synonyms

Child sexual abuse

Definition

While there is a lack of a universally accepted definition, child sexual abuse can be broadly defined as the involvement of children and adolescents in sexual activities they do not fully comprehend and to which they are unable to give informed consent.

Description

Child sexual abuse has become an issue of major widespread concern. Over the past two decades, there has been a surge of attention by clinicians and researchers in the field of mental health, as well as by the media and the lay public. This is not surprising in view of the alarming frequency with which sexual abuse occurs. Although its exact ▶ prevalence is unknown, current estimates suggest that between 6 % and 36 % of females and 1–16 % of males experience some type of unwanted sexual activity during their childhood or youth (Ackard & Neumark-Sztainer, 2003; Andrews, Gould, & Corry, 2002; Johnson, 2004) (see also ▶ Dating Violence). The Canadian incidence survey indicated that 14,406 were reported to Child Protection Services from January to December 1998 (Trocme et al., 2001). Prevalence and incidence estimates of sexual abuse are substantial yet are most likely underestimates as many children do not disclose the abuse to anyone.

An extensive body of research and clinical work has been conducted to document the short- and long-term negative effects of child sexual abuse. Although presentation of specific symptoms vary from child to child (Pearce & Pezzot-Pearce, 2007), a growing body of evidence strongly suggests that sexual abuse may promote a range of deleterious sequelae in childhood and later life (e.g., Jonzon & Lindblad, 2005; Kendall-Tackett, Williams, & Finkelhor, 1993; Romano & De Luca, 1997). Emerging data, for example, indicate that many victimized children may exhibit symptoms such as guilt, loneliness (De Luca, Hazen, & Cutler, 1993), low ▶ self-esteem, ▶ anxiety, depression, and behaviors problems (Calam, Horne, Glasgow, & Cox, 1998; De Luca, Boyes, Furer, Grayston, & Hiebert-Murphy, 1992; De Luca, Boyes, Grayston, & Romano, 1995). Other documented sequelae of sexual abuse in children include a host

of specific problems pertaining to sexual adjustment and behaviors (e.g., compulsive or excessive masturbation, sexual acting out, preoccupation with sexual matters).

Symptoms of post-traumatic stress (PTSD) are sometimes evident and include the following (DSM-IV TR, American Psychiatric Association [APA], 2000): recurrent distressing recollections and dreams of the event, dissociative flashbacks of the traumatic experience itself, physiological reactivity to cues symbolizing the event, diminished interests, feelings of detachment from others, restricted range of affect, sense of foreshortened future, difficulty falling or staying asleep, irritability or outbursts of ▶ anger, hypervigilance, and difficulty concentrating. Kaplow, Hall, Koenen, Dodge, and Amaya-Jackson (2008) in their study of children with PTSD due to sexual abuse found that children who were sexually abused earlier in life had higher levels of PTSD symptoms when the abuse was disclosed. As well, they found that symptoms of dissociation in children were predictive of later attention problems.

The impact of sexual abuse is similar for boys and girls (e.g., Cosentino & Collins, 1996). However, there is some support in the literature to indicate that boys are more likely to exhibit externalizing behavior problems (e.g., acting out aggressively, disruptive behavior, and physical fighting), while girls tend to demonstrate internalized problems (e.g., depression) (Finkelhor, 1990; Gomez-Schwartz, Horowitz, & Cardarelli, 1990). Both boys and girls who experience sexual abuse appear to be at higher risk of later revictimization. Without treatment, victims may continue to manifest symptoms throughout adulthood.

Research on the long-term effects of sexual abuse also reveal a wide range of symptoms. The clearest documentation of these effects are dissociation, anxiety, drug and alcohol abuse, depression, and sexual problems (Bagley & Ramsay, 1986; Briere & Runtz, 1988), symptoms of lack of trust in others (Jehu, 1992; Lisak, 1994), self-esteem deficits, and hostility (e.g., Collings, 1995; Finkelhor, 1990; Lisak, 1994; Rudd & Herzberger, 1999). Recent studies have found a relationship between sexual abuse and eating disorder behavior (e.g., Wonderlich et al., 2001). Male survivors of sexual abuse may also exhibit symptoms of tolerance toward sexual aggression and may experience frustration with their ▶ sexual identity (Abdulrehman & De Luca, 2001). Some researchers have found that past sexual ▶ victimization is related to sexual offending (Kenny, Keogh, & Seidler, 2001; Romano & De Luca, 1996; Schram, Milloy, & Rowe, 1991). In a review of the literature on sexual offenders with histories of sexual victimization, Hanson and Slater (1988) reported that an average of 28 % (range = 0–67 %) disclosed histories of sexual abuse.

The specific impact of child sexual abuse appears to be influenced by a number of mediating factors, which may include the nature or type of victimization, the characteristics of the child, and the resources of the family and community (for reviews, see Browne & Finkelhor, 1986; Kendall-Tackett et al., 1993). Several abuse variables may be associated with more serious long-lasting mental health effects. Among these variables are the frequency; duration; and type of abuse, that is, touching the victim's body versus non-body contact; the relationship of the victim and offender; the number of separate perpetrators; the child's report of abuse was not believed; and the presence of ▶ violence or force (Mannarino & Cohen, 2006; Noll, Trickett, & Putnam, 2003). Adjustment following abuse may be mediated by several qualities of the victim and family, including the child's age and attributional or coping style (e.g., Wolfe, Gentile, & Wolfe, 1989), avoidance coping, and family conflict (Hebert, Trembla, Parent, Daignaul, & Piche, 2006).

It is important to note that while child sexual abuse can have devastating effects on a child's ability to successfully accomplish developmental tasks, clinical experiences and empirical findings suggest that not all children exhibit clinical levels of symptoms. For example, Kendall-Tackett et al. (1993) concluded that about one out of three children with a history of sexual abuse do not show significant observable impairment following the abuse. These children are often described as resilient (Farber & Edgeland, 1987).

The great majority of abusers of both boys and girls are men. Although women have long been viewed as offenders in cases of physical child abuse (see section on ▶ Child Maltreatment: Physical Abuse, Durant, 2010), it is only recently that clinicians and researchers have begun to seriously consider the problem of female-perpetrated sexual abuse of children (for review, see Grayston & De Luca, 1999). Most cases of child sexual abuse involve offenders who have some kind of relationship with the child, that is, a relative or step-relative, a family friend, or a neighbor (Berliner & Elliott, 2001). When the perpetrator is a family member, the effects of abuse are amplified by deep feelings of betrayal of ▶ trust. Moreover, the victimized child may harbor intense negative feelings toward the mother or other family member perceived as having failed to provide protection. This may cause serious difficulties for the child to develop trusting relationships in adulthood. Interventions that address this area can be most effective in helping victimized children learn to trust again.

Clinical reports of assessment for sexually abused children have stressed the importance of a multimethod approach. It is important when working with children who have been victimized to use measures and instruments specific to sexual abuse (e.g., the Trauma Symptom Checklist for Children; Briere, 1996). The purpose of the assessment is to understand (a) what the child has experienced and (b) how the child is coping with the abuse, in order to formulate a diagnostic impression and to develop a treatment plan.

Child clients can pose special challenges for the clinician because children may not give accurate self-reports and their presence in therapy requires parental motivation and cooperation. Areas that intervention may focus on include validation and expression of feelings relative to the sexual abuse, reduction of guilt and responsibility, enhancement of ▶ self-esteem, reduction of anxiety, integration of conflicted feelings about the offender, and education on abuse prevention strategies (Pelcovitz, 1999).

There has been considerable debate in the literature as to which therapies work best for victims of sexual abuse. Although there is a paucity of empirical literature examining treatment outcome, promising results have been demonstrated for specialized forms of treatment for victims of sexual abuse. While many therapeutic modalities have been used in the treatment of sexual abuse, including individual therapy (e.g., Romano & De Luca, 2005, 2006), family therapy (Cohen & Mannarino, 1997), and trauma-focussed play therapy (Gil, 2006), there is a consensus among practitioners that group work is invaluable. Research has demonstrated the promising effects of group therapy (De Luca et al., 1995; De Luca, Grayston, & Romano, 1999; Grayston & De Luca, 1995; Hack, Osachuk, & De Luca, 1994; Hiebert-Murphy, De Luca, & Runtz, 1992). There are a number of compelling reasons why groups may be especially effective in meeting the needs of victimized children including cost effectiveness, as well as opportunities to socialize, interact, and reconnect with peers. Meeting with others who have experienced sexual abuse can reduce the sense of isolation and "differentness" reported by many victimized children (De Luca et al., 1999).

As awareness of the prevalence and potentially deleterious effects of child sexual abuse has grown, increasing emphasis has been placed on the creation and implementation of programs to prevent or reduce its occurrence. However, relatively few studies have explored the ultimate criterion of interest – whether prevention programs are actually effective in reducing the incidence of sexual abuse. Research has shown that programs that develop self-protection skills through explicit training are more effective than programs teaching concepts of sexual abuse (Rispens, Aleman, & Goudena, 1997). Grayston and De Luca (2010) found that exposure to comprehensive home- and/or school-based safety instructions was associated with a reduced likelihood of experiencing subsequent abuse and appeared to be helpful in encouraging those who were victimized to tell another person about the unwanted sexual activity. While many studies have focussed on educating children and parents about sexual abuse (for review, see Renk, Liljequist, Steinberg, Bosco, & Phares, 2002), there is a paucity of reports in the literature targeting potential offenders.

Undoubtedly, an important component in the prevention of sexual abuse is developing treatment programs for offenders. This is an area that warrants more research.

Child sexual abuse is a tragedy that can cause lifelong psychological damage. Developing systematic treatment outcome studies to offset its short- and long-term effects seems critical. Clearly, well-designed clinical interventions and research are imperative if we are to provide more effective prevention and treatment strategies.

Cross-References

- ▶ Child Maltreatment: Neglect
- ▶ Child Maltreatment: Physical Abuse
- ▶ Child Maltreatment: Psychological Maltreatment
- ▶ Child Sexual Abuse
- ▶ Dating Violence
- ▶ Domestic Violence
- ▶ Same-Sex Partner Violence
- ▶ Self-Confidence
- ▶ Stress

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Child Mental Health

► Parental Depression and Child Well-Being

Child Neglect

► Parental Satisfaction and Child Maltreatment

Child Number Desires in Australia

► Childbearing Desires Among Australian Women

Child Obesity

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Synonyms

Child overweight

Definition

Child obesity is a condition in which excess body fat places children and adolescents at risk for associated physical, psychological, social, and quality of life (QoL) deficits. It is defined in terms of standardized body-mass index (zBMI = weight in kilograms divided by height in meters squared $(\text{weight(kg)} \big/ [\text{height(m)}]^2$, normalized to population (z distribution)). The typical relationship of weight to height varies as children age and develop, so age-specific cutoffs based on population studies are typically used to categorize children's BMI, standardized for age and sex. While the International Obesity Task Force (IOTF) international standard growth chart enables global comparison of child obesity prevalence (Cole, Bellizzi, Flegal, & Dietz, 2000), many countries continue to use their own population-specific charts (Han, Lawlor, & Kimm, 2010).

Description

Globally, rates of childhood obesity increased dramatically between 1980 and 2010 (Han, Lawlor, & Kimm, 2010), with approximately 10 % of children worldwide now either overweight or obese (Bessesen, 2008). Under the age of five alone, more than 40 million children worldwide are overweight or obese (World Health Organization [WHO], 2012). The essential cause of obesity in children (as well as in adults) is an imbalance between calories consumed and calories expended. In the past three decades, there has been a global increase in intake of energy-dense foods high in fat, salt, and sugars, while at the same time there has been a gradual decrease in physical activity due to the increasingly sedentary nature of daily life associated with technology use and urbanization (WHO).

During childhood and adolescence, obesity is associated with type 2 diabetes, prediabetes, metabolic syndrome, polycystic ovarian syndrome, and nonalcoholic fatty liver disease (Cruz et al., 2005). Childhood and adolescent obesity have also been linked to adult obesity and chronic conditions associated with adult obesity, including diabetes and cardiovascular disease (Power, Lake, & Cole, 1997; Wright, Parker, Lamont, & Craft, 2001).

Obesity has been associated with lower health-related, social-related, and self-related QoL in children and adolescents (Keating, Moodie, & Swinburn, 2011; Ottova, Erhart, Rajmil, Dettenborn-Betz, & Ravens-Sieberer, 2012; Tsiros et al., 2009). Child obesity has also been associated with poor perceived health (Swallen, Reither, Haas, & Meier, 2005), low self-esteem (Griffiths, Parsons, & Hill, 2010), negative body image (Edwards, Patrick, Skalicky, Huang, & Hobby, 2011), depression (Goodman & Whitaker, 2002), social isolation (Strauss & Pollack, 2003), and stigma (Jensen & Steele, 2012). Obese children and youth have been found to complete fewer years of school, be less likely to marry, have lower household incomes, and have higher rates of household poverty than their non-obese peers (Gortmaker, Must, Perrin, Sobol, & Dietz, 1993).

There is evidence that combined behavioral lifestyle interventions (i.e., dietary, physical activity, and/or behavioral therapy) can produce clinically meaningful reductions in obesity in children and adolescents (Oude Luttikhuis et al., 2009) and also that reductions in weight can result in improvements in QoL (Modi & Zeller, 2011). To date, there is still little evidence for interventions producing long-term changes in weight status however.

Additional high-quality research is needed in investigating the psychosocial determinants of behavior change, strategies for improving clinician-family interaction patterns, and the elements of cost-effective programs for primary and community care (Oude Luttikhuis et al., 2009). There are currently two weight-specific QoL measures available for children and adolescents, the Youth Quality of Life Instrument-Weight module (YQOL-W, ages 11–18 years) (Morales, Edwards, Flores, Barr, & Patrick, 2011; Patrick et al., 2011) and the Impact of Weight on Quality of Life (IWQOL)-Kids (ages 11–19 years) (Kolotkin et al., 2006; Modi & Zeller, 2011).

Cross-References

- At-risk Children
- Body Image
- Child and Adolescent Life Satisfaction
- Child Well-Being
- Childhood, Fast Food, Obesity, and Happiness
- Globalization and Well-Being
- Health Risk
- Obesity, an Overview
- Self-Esteem
- Social Exclusion
- Youth Quality of Life Instruments

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Child Overweight

► Child Obesity

Child Participation

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Synonyms

Children's participation and adolescents' participation

Definition

The concept of children and adolescents' participation includes a broad range of definitions, references, and practical applications associated with different theoretical approaches as well as different methodologies for its study.

One of the definitions of social participation that places most emphasis on the **capacity for agency** is that proposed by Arnillas and Paccuar (2005), who refer to children' and adolescents' exercising empowerment, understood as the right – assumed as a capacity – to express an opinion before and with others, to have their opinions given serious consideration, and to take responsible shared decisions in accordance with their level of maturity and development on issues that affect their lives and their communities: the capacity to express an opinion, take decisions, and act in an organized manner (p. 5).

Description

Social participation has often been associated with enhanced quality of life among adults as well as children and adolescents (Carcolé, Martín, & Ruíz, 1989). People's satisfaction with their social participation is a good indicator that it provides them with greater well-being.

Studies on the relationship between and mutual influence of social participation and personal well-being among young people are scarce. Most of those that do exist link the relationship between the two concepts to processes of development and to the following factors:

(a) ***Relationships with Other People***. Many authors state that participation increases both the number of personal relationships and their quality. It therefore helps to increase personal well-being by providing the opportunity to cultivate new friendships (De Paiva, 2009; Vidal, 2006; Martínez Muñoz & Martínez Ten, 2000; Chawla, 2001; Evans & Spicer, 2008).

(b) Developing One's Identity ***(Self)***. Social participation has positive effects on certain aspects of the "dimension of

self": it increases the sense of self-efficacy (Zimmermann, 2000; Chawla, 2001), constructs a personality with critical ability (Martínez Muñoz & Martínez Ten, 2000), creates a more positive sense of self (Chawla, 2001), increases self-esteem (Vidal, 2006; Torres, 2009), and leads to a positive development of self-concept (Velázquez, 1997, Silva, 2004; Silva & Martinez, 2007). Various authors (Chawla, 2001; Kirby, 2002; Torres, 2009; De Paiva, 2009; Evans & Spicer, 2008) consider social participation to bring with it personal well-being, manifested in increased self-confidence and self-esteem.

(c) Satisfaction with Certain Aspects of ***One's Own Life***. Vidal (2006) states that social participation is related to an increased perception of control of one's own life. In the words of Kirby (2002), participating in decision-making can help children and adolescents feel that their opinions are important, that they are listened to, and that they are able to change aspects of their lives: they also perceive that they have choices (Martínez Muñoz & Martínez Ten, 2000) and can act to make things different (Save the Children, 2002; Torres, 2009).

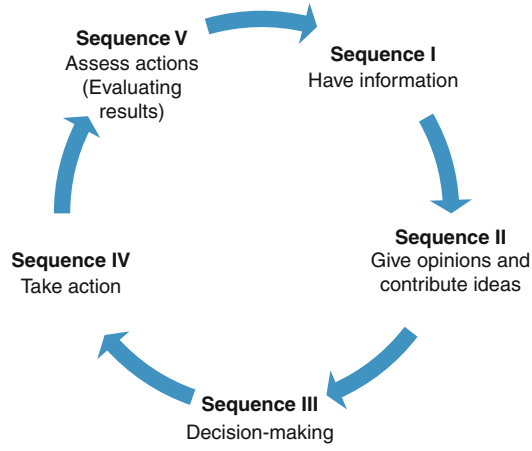
(d) Satisfaction with Different ***Aspects of School Life***. Evans and Spicer (2008) comment that social participation helps to develop abilities and skills and is related to success at school. In respect of this, Martínez, Inglés, Piqueras, and Oblitas (2010) point out that prosocial children and adolescents adapt better to school life and have greater academic success. De Paiva (2009) states that social participation is an opportunity to learn from new situations and one's own life experience, bringing new knowledge on a personal level.

Social participation by children and adolescents is not a neutral experience but rather has an impact on personal well-being. Navarro (2011) proposes a theoretical model that aims to explain the relationship between social participation and personal well-being from a more global viewpoint. This relationship is linked to the interrelation of three factors which have been widely and independently studied by different authors: (a) the self-allocation of a participative role by the child or adolescent, (b) the aspirations for change held by the child or adolescent, and (c) adults' attitudes and expectations with regard to children and adolescents and their social participation.

Self-Allocation of a Participative Role by the Child or Adolescent

For social participation to be motivating, it has to be voluntary (United Nations International Children's Emergency Fund (UNICEF), 2010; Lansdown, 2001; Naval, 2003) and freely chosen as a personal option (Casas, González et al., 2008). Self-allocation of a participative role refers to the position adopted by young people in relation to social participation: choosing whether they wish to involve themselves or not (e.g., in a project) and to what degree.

Ferrer (2005) considers these to be four phases of participation: information, opinion, decision-making, and readiness to act. In line with this thinking, we can reinterpret the proposed phases as types of involvement desired by children and adolescents and design a functional sequence related to different aspects of children and adolescents' position or personal role allocation with regard to social participation (see Fig. 1) at five functional stages:



Child Participation, Fig. 1 Functional sequence of children and adolescents' personal positioning with regard to social participation (Source: Navarro, 2011)

- *Sequence 1: Collect information*. Children and adolescents want to be informed about what happens around them and affects them, so they collect information.
- *Sequence 2: Develop information (give opinions and contribute ideas)*. Children and adolescents are interested and motivated to express both their opinion and their ideas on the issues that affect them by developing the information they have.
- *Sequence 3: Decision-making*. Children and adolescents want to become involved in decision-making on the projects being carried out at their school, for example. Decisions may be taken jointly with adults or with the peer group.
- *Sequence 4*: *Take action*. Children and adolescents want to act on and implement what they have decided. On this level, there is joint responsibility with adults.
- *Sequence 5*: *Assess action*. On this final level, children and adolescents want to evaluate the results achieved by their actions. The said evaluation will provide new information.

Each of these functional sequences may entail a different level of involvement and responsibility with regard to social participation. There may also be an increase in the following as we move through the sequences: (a) empowerment of the children and/or adolescents, understood as the process of becoming aware of their abilities, increasing their ability to transform both themselves and their environment (Torres, 2009);

(b) their autonomy, which refers to the feeling of being able to choose, that is, having the experience of choosing (Ryan & Deci, 2000) and deciding; and (c) their capacity for agency, which refers to people's ability to take action toward meeting objectives of importance to them (Alkire, 2005).

This model, similar to a functional feedback sequence used in cybernetics, takes a circular route and takes into consideration feedback from the process. This in effect means that assessing the action (level 5) leads to the process beginning again, as this phase contributes to reinforcing a new position with regard to social participation. Therefore, it is a dynamic and changing progression, which is flexible and enriching on all levels.

The positioning adopted by children and adolescents with regard to participation may be conscious or unconscious. In the conscious positioning, children and adolescents are aware of what participation means and what it involves, they have the skills and abilities to achieve it, and they are able to freely decide whether they want to participate or not. In the second, the unconscious, or uninformed, positioning, children and adolescents are not very informed or not informed at all with regard to what participation is and its implications.

Aspirations for Personal Change

Aspirations for personal change are related to children and adolescents wanting to participate, wanting to stop being passive, and wanting to become more active or involved, but not doing so. Wanting to participate but not doing so may result from two situations:

(a) The existence of personal limitations (embarrassment, lack of communicative and/or social abilities and skills). These children and adolescents will require support and confidence from the adults around them, who will need to be flexible so as to give any type of support they need (Kirby & Gibbs, 2006).

(b) It is not being possible to participate in the environment in which they move, either because there are no initiatives to promote participation or because the attitude of adults prevents certain levels of participation being reached.

Adults' Expectations and Attitudes

Adults' role is key in children and adolescents' social participation, as it is they who facilitate or create obstacles to it. The third factor refers to two aspects of the role played by adults:

- The expectations adults have in relation to children and adolescents refer to the place adults award them in social life and more particularly in social participation. It is possible that these expectations correspond to levels, reflected in theoretical terms in scales such as that proposed by Hart (1992).

The expected role (role expectations) by adults with regard to participation by children and adolescents may situate them either at the bottom of the scale or, contrarily, at the top.

- Adults' attitudes toward children and adolescents are directly linked to the social representation they have of childhood and adolescence and their participation. Those beliefs founded on considering children as the "not yets" (as in, e.g., not yet capable, not yet responsible) (Verhellen, 2002; Qvortrup, 1994) implicitly entail hierarchical and vertical, authoritarian, or paternalistic relationships. Contrarily, those shared images of childhood and adolescence as "already yes" and which understand children and adolescents as social subjects, that is, as human beings with specific characteristics and abilities (Cussiánovich, 2005, 2007) will lead to egalitarian relationships based on trust and respect.

Discussion

The relationship between the three factors described above must be explored in the different situations where children and adolescents' social participation may lead to greater personal well-being or diminish it. When a positive correlation is found between children and adolescents' self-allocation of a participative role and aspirations for change, on the one hand, and adults' expectations and attitudes, on the other, participation will increase personal well-being. On the contrary, when there is no correlation between these two factors, such as in the case when children and adolescents wish to participate and adults show resistance to this, or they do not wish to actively participate and adults do not respect this, their personal well-being will decrease.

Each of the three factors involved in the relationship between participation and well-being may be linked to levels of intervention that can be translated into the following actions:

– If we focus on the first of the factors, *children and adolescents' self-allocation of a participative role*, intervention should involve raising children's awareness of their right to participate so that they are able to consciously decide whether to participate or not. In respect of this, Liebel (2009) states that children and adolescents know very little about their rights due to the fact that almost no country has actively and adequately publicized them or produced comprehensive and effective educational programs in the sphere of human rights for children and adolescents; this is despite the fact that the United Nations Committee for Children's Rights has established directives and recommendations for developing programs and informative campaigns and producing material for their publication. There is a need, then, to design programs that provide children with information on the advantages of participating.
– If we turn to the second factor, *aspirations for change*, training courses might be created for children to give them the personal and collective skills and competences necessary for participating, as well as certain abilities to effectively express their interests, opinions, and desires, come to agreements, and negotiate and reach consensus, in order that their participative experience be an enriching one.
– With regard to the third factor, *adults' expectations and attitudes*, actions that may be undertaken relate to promoting seminars and training courses for adults, particularly those who have more contact with children. The main aims of these should be the following: (a) to offer tools for facilitating the culture of participation; (b) to reflect on adults' attitudes toward children and adolescents, so as to promote relationships based on respect and commitment and where children and adolescents are perceived as active social subjects; and (c) to equip adults with the practical techniques to make it possible for social participation by children and adolescents to be real and conducted with a high level of quality and efficiency.

In order to advance research into children and adolescents' social participation and the impact it has on their personal well-being, it is necessary to take into account two issues some authors (Percy-Smith & Thomas, 2010) consider to be emerging: (a) understanding social participation above and beyond "expressing an opinion," linking it to their self-determination, empowerment, and capacity for agency, which involves them having

higher levels of responsibility, and (b) the role of adults and the quality of their relationships with children and adolescents.

Cross-References

- ▶ Empowerment
- ▶ Social Participation
- ▶ Social Support

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Child Physical Assault

▶ Child Maltreatment: Physical Abuse

Child Poverty

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Synonyms

Child deprivation; Child living standards

Definition

Child ▶ poverty can be regarded as a situation where children live in low-income households. It can also refer to a situation when children are deprived, or have an inadequate standard of living, or where ▶ child well-being is compromised. Children are usually defined as those aged 0–17 inclusive.

Description

The United Nations' *Convention on the Rights of the Child* (United Nations [UN], 1990) has been an important foundation for research on issues relating to child poverty and ▶ child well-being over the last two decades (United Nations Children's Fund [UNICEF], 2009). Analysis of child poverty is usually underpinned by the ▶ child rights and child well-being literature.

Child poverty can be defined and measured in many ways, the most common distinction being an income poverty approach versus a multidimensional standard of living approach – see Delamonica, Minujin, Davidziuk, and Gonzalez (2006) and White, Leavy, and Masters (2002) for reviews of approaches to the definition and measurement of child poverty. The definition employed by researchers will be influenced by their conceptual interpretation of ▶ poverty.

Some define child poverty as children living in low-income households, either in the form of households with insufficient resources to purchase a basket of goods or based on their position somewhere along the household income spectrum, such as below 60 % median income (Rio Group, 2006).

The extent of child poverty derived from income definitions will depend not only on the proportion of children actually living in low-income households but also on the accuracy of the dataset used to calculate the number of children below the selected threshold. It can be a challenge to measure income accurately in surveys, particularly if people receive food or goods in-kind. The extent of child income poverty will also depend on the type of equivalence scale used. This determines whether the child is given the same weight as an adult (i.e., per capita) or some proportion of the weight of an adult. The modified Organisation for Economic Co-operation and Development (OECD) equivalence scale, for

example, assigns a weight of 1 to the household head, 0.5 to each additional adult, and 0.3 to each child (aged 0–13 inclusive).

Others define child poverty in a multidimensional way by, for example, identifying children with poor access to clean water and sanitation, living in inadequate housing, or with a poor health status. Important attempts have been made to articulate and measure multidimensional child poverty or child deprivation (e.g., Delamonica & Minujin, 2007; Gordon, Nandy, Pantazis, Pemberton, & Townsend, 2003; Kurukulasuriya & Engilbertsdottir, 2011). The results are sometimes presented as separate indicators (see http://www.childindicators.org/ for information on ▶ child indicators research) and sometimes combined into indices of deprivation. There have also been attempts to measure child deprivation using composite indices at a small-area level (e.g., Barnes, Noble, Wright, & Dawes, 2009; Bradshaw et al., 2008).

An important development in child poverty and related studies is the attempt to ensure that children are used as the unit of analysis rather than households. For a range of reasons, low-income households tend to contain greater numbers of children, and so the use of the household as the unit of analysis can disguise the extent of child poverty.

Child poverty not only has a negative impact on the lives of the children experiencing poverty but also on their prospects in adulthood (UNICEF, 2004). Several longitudinal studies enable child outcomes to be explored; for example, the Young Lives Study is a study of 12,000 children in Ethiopia, India, Peru, and Vietnam (http://www.younglives.org.uk/), and the UK Millennium Cohort Study tracks 19,000 babies born in the UK in 2000 and 2001 (Hansen, Joshi, & Dex, 2010). See also Pirus & Leridon (2010) for information on a number of child cohort studies from across the world.

There has been a growing focus on ▶ child participation and the importance of children's views in defining poverty. Not only can researchers learn from children about their experiences of poverty, but children can also be involved in the process of defining poverty and in identifying solutions (Jones & Sumner, 2011).

There are a number of initiatives to monitor the extent of child poverty in countries across the world (e.g., Save the Children, 2011; UNICEF, 2011). These help to highlight countries that are doing well and those that have a long way to go in terms of promoting ▶ child development and child well-being. Fueled by a concern about the prospects of meeting the Millennium Development Goals, UNICEF is undertaking a Global Study on Child Poverty and Disparities (http://www.unicefglobalstudy.blogspot.com/) and has established the international Child Poverty Network. Many countries monitor child poverty closely, for example, KIDS COUNT in the USA (http://datacenter.kidscount.org/) and Children Count in South Africa (http://www.childrencount.ci.org.za/).

Children tend to be regarded by societies as being among the most "deserving" of the groups of poor people, along with older people and the sick and disabled. Nevertheless, in spite of many good intentions, child poverty remains one of the greatest challenges for policy makers in the twenty-first century (Minujin & Nandy, 2012). In order to reduce or even eradicate child poverty, there is a need for a strong political will and dedicated resources that take into account not only the children themselves but their caregivers and neighborhoods.

Cross-References

- ▶ Child and Family Well-Being
- ▶ Child and Youth Well-Being Index
- ▶ Child Development
- ▶ Child Friendly Cities
- ▶ Child Indicators Research
- ▶ Child Participation
- ▶ Child Rights
- ▶ Child Well-Being
- ▶ Child Well-Being Index
- ▶ Deprivation
- ▶ Poverty
- ▶ Poverty Measurement

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Child Poverty in Japan

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Synonyms

Japanese General Social Surveys (JGSS)

Definition

Child poverty in Japan refers to the phenomenon of children living in poverty, i.e., lower socioeconomic conditions in Japan.

Description

▶ Child poverty is now a central issue to be addressed in most advanced countries. One recent cross-country study by OECD (2008) revealed that the risk of poverty for young adults and families with children has risen, while poverty among older people has fallen. The child poverty ratio, which is the share of children who live in households with income levels below the poverty line, was approximately 12 % on average among OECD member countries in the mid-2000s, which was 1 % higher than the mid-1990s.

As in other advanced nations, child poverty has challenged the existing social policies in Japan (Abe, 2008). Indeed, OECD (2008) showed that 58 % of single working parents in Japan lived in relative poverty, as compared with an OECD average of around 20 %. Moreover, the child poverty ratio was about 14 % in the mid-2000s, which was three percentage points higher than that in the mid-1980s, and exceeded the OECD average of 12 %. At the same time, concerns about the potential transmission of poverty from parents to children have become increasingly heightened in Japan against the backdrop of widening income inequality and increasing poverty risks (Tachibanaki, 2005).

There are two key reasons for child poverty in Japan. First is the gender wage gap in wages. Child poverty is most prevalent among single-parent families, most of which are female-headed, and most single mothers are part-time workers. The wage of full-time female workers and part-time female workers in 2008 was 69 % and 49 %, respectively, of those of full-time male workers. Second is insufficient support for childcare. The current social security scheme placed the most importance on benefits to elderly, leaving public expenditures on family benefits only 5.5 % of total social expenditure in 2010, much lower compared to other advanced countries. Child care arrangements and benefits for single mothers are also not sufficient (Tokoro, 2003).

Oshio, Sano, and Kobayashi (2010) found that child poverty has a persistent impact on subsequent life outcomes, based on micro data collected from the Japanese General Social Surveys (JGSS). In line with conventional wisdom and the results from many previous studies, those from poor families tend to have lower ▶ educational attainment, face more poverty risk, and consider themselves to be less happy and to assess their health as being poorer. In addition, they found that child poverty strongly affects life outcomes even after controlling for its impacts on previous outcomes.

Child poverty also is linked to ▶ social exclusion in later life in Japan. Abe (2010) showed that child poverty has a positive and significant effect on one's current lack of ▶ basic needs (food, clothing, and medical care), even after controlling for current income, age, sex, household type, and experiences of divorce and ▶ layoff. This indicates that poverty during childhood not only influences adult well-being via education and occupation (and thus, income), but there is also a pathway that directly connects childhood poverty and adult social exclusion directly, a result generally consistent with Oshio et al. (2010). These empirical results suggest that the adverse effect of child poverty cannot be easily overcome and that policy measures to reduce child poverty are required to ensure that children have equal opportunities to achieving success in life.

Discussion

Child poverty is now one of central issues to be addressed in social policies in Japan. The government introduced a new child allowance scheme in June 2010. Under the new child allowance law, 13,000 yen (about $157) per child shall be paid monthly to parents until the child leaves junior high school (at age 15). The allowance under the previous scheme was 5,000 yen for each of the first and the second child (ren) and 10,000 yen for each of the third and beyond children for parents whose income was below a certain level. However, reforming the scheme is now under debate, and it remains unclear about the effect of the enhanced child allowance.

Cross-References

▶ Child Abuse
▶ Poverty Rate

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Child Psychopathology

▶ At-Risk Children

Child Quality of Life

▶ Child Well-Being

Child Rights

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Synonyms

Children's rights; Rights of the child

Definition

It is a conceptual approach toward children (defined by the UN Convention on the Rights of the Child as all human beings below the age of 18 unless the local legislation provides otherwise) as rights holders. It is generally accepted that children hold basic universal human rights such as the right to life, equality, and dignity; children also hold child-specific rights such as the right to development, to nurture and care, and to education. Legal rights such as the right to free speech, due process, and privacy have also been acknowledged in laws and legal precedents, but their scope is generally more limited than that of the legal rights of adults. The most disputable is the right of children to make autonomous decisions or, alternatively, to take part in decision-making processes regarding their own matters.

Description

Historical Overview

"Children's rights" is a relatively modern concept that has been developed largely during the twentieth century. Until the end of the eighteenth and the beginning of the nineteenth centuries, children in Western nations were regarded as property of their fathers, who could sell, abandon, marry, physically punish, or enslave their children without any state intervention (Hart, 1991).

The first child-related legislation developed during the industrial revolution, which generated a need to regulate children's labor. Youth labor laws banned the work of young children and created limitations on the work of adolescents. Next, mandatory education laws were enacted in order to secure children's future capabilities and prevent truancy and public disorder. Toward the end of the nineteenth century and the beginning of the twentieth century, the "child saviors" movement initiated laws and societies protecting children from abuse. The youth court in Chicago was established in 1899 and signaled the beginning of a separate juvenile justice system, where youth offenses as well as child protection cases were adjudicated separately in a protectionist manner. The "child saving" approach was salient during most of the twentieth century and emphasized the need to protect children's safety and well-being, sometime at the price of their autonomy.

During the 1970s, few scholars, and particularly John Holt and Richard Farson, argued that children should be seen as a minority group that deserves to have adult freedoms and self-determination rights (Farson, 1974; Holt, 1974). These "Child Liberationists" advocated for granting children adults' rights such as the right to vote, to own property, to sign contracts, to drive, and to choose their education. The liberationist movement was criticized for "abandoning children to their rights" but at the same time emphasized the need to move beyond protection and reevaluate the paternalistic approach toward children. In 1973, Hilary Rodham (Clinton) published a groundbreaking article on children's rights (Rodham, 1973). Clinton's paper called for a reexamination of the protectionist approach toward children and to provide children with greater freedoms and legal powers as they grow and develop.

While children's rights are still "A slogan in search of a definition" in America, as Clinton famously noted in 1973, children's rights have been constantly shaped and reshaped internationally.

The Geneva Declaration (1924) was the first international effort to encapsulate children's rights. It included five statements regarding the need to protect, feed, save, and nurture all children. The UN Declaration of 1959 was more detailed and regarded children as subjects to their own legal rights but still addressed only the protective aspects of children's rights. Children's rights were briefly acknowledged in the two prominent human rights treaties accepted by the UN General Assembly in 1966. The International Covenant on Civil and Political Rights provided in Article 24(1) the right of all children, without any discrimination, to be protected. The International Covenant on Economic, Social and Cultural Rights provided in Article 10 the right of all children to receive special measures of assistance without any discrimination.

By far the most influential children's rights document worldwide is the UN Convention on the Rights of the Child (hereinafter: the Convention), accepted unanimously in the General Assembly on November 20th 1989. The Convention is the most universally embraced treaty in history. Almost all states have joined the Convention through signature and ratification, with Somalia and the US being the only exceptions. The Convention, for the first time, acknowledged children as individuals fully entitled to human rights – civil, political, economic, social, and cultural – without neglecting their special needs for protection (Detrick, Doek, & Cantwell, 1992, p. 27).

Children's Rights According to the UN Convention on the Rights of the Child

The Convention represents a holistic approach according to which its various articles should be implemented interdependently. It includes four "general principles," which are key children's rights as well as guides for the interpretation of the other rights set in the Convention:

1. The right to equality: Children's rights should be granted to all children, without any discrimination based on their or their parents' background. The equality right has been interpreted as requiring the provision of special assistance to those who are at a weaker position, thus promoting a "substantive equality" agenda (Article 2).
2. The right to have their best interests considered as a primary consideration in all matters involving the child: The "best-interests" principle also created an obligation upon states to ensure children's safety and care as needed for their well-being (Article 3).
3. The right to life, survival, and development: State parties are expected to ensure, to the maximum extent possible, that child's mortality is prevented, and basic needs for survival and development are provided (Article 6).
4. The right to participation: All children who are capable of forming their views are entitled to express their views freely and to have their views given due weight according to their age and maturity (Article 12).

Beyond the four guiding principles, the Convention includes a comprehensive list of specific children's rights. Some of the rights apply to special groups such as children with disabilities, refugee children, and children in out-of-home care. A common method of categorizing the different rights set out in the Convention is according to the Three Ps: Protection (rights related to the protection of children against abuse, neglect, and exploitation), Provision (rights related to the provision of public services such as health, social security, food, and education), and Participation (rights related to children's involvement in civil society such as freedom to express views; freedom of speech; access to information; freedom of thought, conscience, and religion; and freedom of association and assembly).

The Impact of Children's Rights on Children's Quality of Life (QOL)

There are clear links between the children's rights terminology and the study of children's quality of life. According to Ben-Arieh, the Convention offers a normative framework for understanding children's well-being (Ben-Arieh, 2008). The Convention's four general principles fit closely with conceptualizations of child well-being. The nondiscrimination principle argues for addressing the life situations and well-being of excluded

groups of children, such as those with disabilities, children in institutions, or refugee children, and to disaggregate available data by age, gender, ethnicity, geography, and economic background. The best-interests principle implies a child-focused approach and emphasizes children's role as citizens in their own right. It therefore requires researchers to use the child as a unit of analysis. The complexity of children's lives is reflected in the third principle, that of survival and development (Article 6). The Convention promotes a holistic view of child development and well-being, giving equal weight to children's civil, political, social, economic, and cultural rights and stressing that these rights are interrelated, universal, and indivisible. Concepts of child well-being accordingly must be multidimensional (relate to various aspects of the child's livelihood) and ecological (refer to the child within his/her familial, social, national, and cultural contexts). Finally, the participation principle emphasizes the importance of collecting data based on children's own perspectives (Casas, 1997).

A global effort to develop child-centered indicators on children's rights and children's well-being is conducted by Childwatch International. In this project, data from selected countries are aggregated by local researchers based on agreed-upon children's rights indicators while preserving specific cultural and national characteristics (Casas, 1997).

How to measure well-being is an unresolved issue among scholars, however, in large part because of the complexity of the construct. An individual's well-being is the product of a potentially unlimited number of variables that are extremely difficult, if not impossible, to identify and assess one by one. In his book *The Rights of the Child and the Changing Image of Childhood*, Phillip Veerman (1992) develops an integrated theory of children's rights based on the concept of children's well-being or *quality of life*. With Samuel Shye's (1989) ► *Systemic Quality of Life Model* as a conceptual framework, Veerman discusses milestones in the evolution of children's rights and systematically content-analyzes more than 40 declarations and conventions on children's rights. Veerman writes: "with the help of the 'Systemic Quality of Life Model' developed by Samuel Shye, we can successfully separate the various claims that are made on behalf of children. ... [This model] is a practical tool which provides us with uniform, rational set of criteria by which very rich and intricate material can be analyzed, compared and evaluated" (Veerman, 1992, p. 39).

Shye's Systemic Quality of Life Model rests on the idea that the human being is an "action system" that functions in a wide variety of functioning modes encompassing the entire human condition. On the basis of two axioms from *Faceted Action System Theory* (Shye, 1985), the model identifies four distinct and exhaustive *functioning subsystems* – the psychological, the physical, the social, and the cultural – and within each, four distinct and exhaustive functioning modes. People's quality of life is defined as their functioning effectiveness in each of the 16 areas generated by the four functioning subsystems and the four *functioning modes*: the expressive, the adaptive, the integrative, and the conservative. According to Veerman, the more content areas of Shye's model are covered by a declaration or a convention, the more developed or *complete* is that declaration or convention. Accordingly, Veerman and Shye (1992) use the Systemic Quality of Life Model prescriptively to construct a declaration of the rights of the child that is "complete" in this sense.

Despite these theoretical links between children's rights and children's quality of life, it is unclear to what extent has the children's rights approach actually improved children's quality of life across the globe. One effort to promote children's quality of life using a children's rights terminology is the document A World Fit for Children, adopted in May 2002 by the UN General Assembly. The document states the world's commitment to secure the well-being of children through the protection and promotion of their basic rights. The World Report on Violence against Children is another such effort, which recommends educating children and adults on the rights of children and to fully respect the rights of the child as a strategy for reducing violence against children (Pinheiro, 2006).

Some specific rights, however, have been successful in generating change in children's quality of life. One major example is the ban against corporal punishment. Over 20 countries have enacted laws prohibiting the use of corporal punishment toward children in the past three decades, echoing children's right to be protected from violence within their homes and schools. Sweden took the lead in 1979 and saw a significant reduction in public support for physical punishment on children (Durrant, 2000).

Another prime example is the effect of the participation right on children's well-being and quality of life. Psychosocial studies show that children who are provided with opportunities to participate in decision-making processes and who feel they can affect their environments cope better with stress and have higher self-esteem (de-Winter et al., 1999). Within families, children's involvement in the design of their environments through constant dialogue and opportunities to have a voice positively affect their development (Selman, 1976). The involvement of children in decision-making processes improves adults' understanding of their needs and wishes and accordingly leads to better decisions affecting their quality of life (Lansdown, 2001). Children's right to take part in decision-making processes affecting their lives has been promoted through legislation and practices in many parts of the world and in many child-related arenas such as child protection, child labor, education systems, and health-related decisions. Roger Hart's "Ladder of Participation" (1992) has contributed to the theoretical development of the concept of children's participation and can be used as a measurement to evaluate children's participation in various public arenas. The ladder distinguishes between nonparticipation engagements with children (such as tokenism, manipulation, and decoration) and true participation (categorized into different levels differentiating between information provision, consultation, shared decision-making, and youth-led projects).

If the status of children has not significantly changed across the globe, still the children's rights approach has contributed to the development of child indicators in several important ways (Ben-Arieh, 2008). First, children as a group became more visible, thus calling for more data on their life and well-being. Second, the Convention established a standard by which to monitor children's rights globally. Third, by the breadth of topics and issues covered, children's rights demand indicators in sub-domains and areas of interest that were not previously measured or monitored.

Cross-References

- ▶ Faceted Action System Theory (FAST)
- ▶ Systemic Quality of Life Model (SQOL)

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Child Self-Completed Measure

► Child Self-Report(s)

Child Self-Report (CHQ-CF87)

► Child Health Questionnaire (CHQ)

Child Self-Report(s)

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Synonyms

Child self-completed measure

Definition

Child self-report refers to a ► quality of life measure such as a questionnaire that a child completes independently.

Description

It is generally acknowledged that the assessment of subjective phenomena such as quality of life must be carried out by individuals themselves since they are in the best position to judge the impact of experiences – be that related to social, economic, health, or other factors – on their own well-being. In health care, for example, it is accepted that patients have the best perspective on the impact of illness and treatment, as they experience directly the benefits and burdens of therapeutic interventions and are also aware of hidden, indirect benefits and costs which may go unnoticed by the objective observer. Asking patients directly about their experiences therefore has the potential to yield clinically meaningful end points that can be made an integral part of clinical decision-making. Self-report measures are therefore a necessary part of quality of life measurement.

Traditionally, however, children have been regarded as unreliable reporters of issues related to well-being, with the result that parents have been used as proxy reporters of child quality of life. Indeed, the development of child-completed instruments has, in the past, been limited because of the argument that children lack the cognitive and linguistic skills necessary to self-complete quality of life measures. However, children's cognitive skills are now known to be more sophisticated than was once believed (Haskell, 2001), and there is increasing evidence to suggest that children are able to engage in the cognitive processes necessary to self-report their well-being and can communicate this as long as measurement scales are presented in developmentally appropriate ways (Wallander, 2001). Indeed, there is evidence that children are competent in the kind of abstract reasoning and recall processes necessitated by self-reported quality of life even in the preschool years (e.g., Bauer, 2002). The development of simpler measures suitable for younger children (e.g., the ► Pediatric Quality of Life Inventory™ (PedsQL™), Varni, Seid, & Rode, 1999) has also removed some objections to use of child self-reports. Indeed, there is increasing evidence that these

self-reports are both reliable and valid (Varni et al., 1999; Varni, Seid, & Kurtin, 2001; Varni, Burwinkle, Seid & Skarr, 2003). For instance, adequate ▶ internal consistency reliability (>0.70) and sound ▶ construct validity, using the known groups approach, has been demonstrated for the majority of the child self-report subscales of the PedsQL™ for children as young as 5 years (Varni, Limbers, & Burwinkle, 2007). There is also increasing evidence that children below 8 years are able to use rating scales, can use common response terms and can understand and interpret underlying concepts, and therefore, should be able to assess their own quality of life (Creemens, Eiser, & Blades, 2006).

Thus, many of the original objections to the use of self-report measures with children have now been removed, leading to greater focus on the development of measurement tools designed specifically for use by children (e.g., Varni, Burwinkle, Seid, & Skarr, 2003). This is particularly important in health care where the inclusion of quality of life measurement in clinical trials is now standard practice in pediatric as well as adult pharmaceutical trials (Matza, Swensen, Flood, Secnik, & Leidy, 2004). Child self-reports are now widely accepted as the standard in pediatric ▶ health-related quality of life (Varni et al., 2001), and some new measures comprise child self-report only (e.g., Bhatia et al., 2002).

This does not however mean that the value of proxy parent reports is diminishing. Many experts still argue for the necessity of including a parent as well as a child report for comprehensive quality of life measurement in pediatrics (Mulhern et al., 1989; Varni et al., 2001). Obtaining the parent's perspective is suggested to be important because of the dependent nature of the parent–child relationship; it is usually the parent who makes the initial assessment of the impact of a child's health on their well-being and makes the decision whether or not to seek professional help; thus, more often than not it is the parent's perception of their child's quality of life that has the greatest influence on the use of ▶ health care services (Varni, et al., 2001). In this scenario, the parent report is being used to supplement the information given by the child in order to provide what is believed to be a more complete sense of the child's quality of life. While the term proxy is commonly used for these kinds of data, this is technically incorrect, because the parent is not standing in for, nor substituting for, the child – which is after all the definition of the term "proxy." In this instance, the parent should not be seen as a proxy reporter but rather an "other rater" (Snow, Cook, Lin, Morgan, & Magaziner, 2005).

While the extent of parent–child agreement is still not always clear (Upton, Lawford, & Eiser, 2008), there are circumstances where a parent report may be needed as a true proxy; very young children or those who are extremely ill or disabled may be unable to provide information on quality of life. There may therefore be occasions when using an adult as a proxy respondent is the only option (Waters, 2000). Thus, in some situations parents may provide valuable information about a child's quality of life that would otherwise be unobtainable through child self-report alone.

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Child Sexual Abuse

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Synonyms

Abuse, sexual; Aggression against children; Child maltreatment: sexual abuse; Children sexual abuse

Definition

Child sexual abuse is defined in most states in the United States as sexual contact between an adult and a child less than 18 years of age in which the child is used for sexual gratification of the adult or substantially older child. A parent or guardian who permits another individual to have sexual contact with a child is identified as sexually abusive.

Description

Child sexual abuse can involve a number of activities perpetrated upon a child in order for an adult to achieve sexual gratification. These activities include oral to genital, genital to genital, genital to rectal, hand to genital, or hand to breast contact; exposing sexual anatomy; forced viewing of sexual anatomy; showing pornography to a child; or using a child in the production of pornography (Johnson, 2004). It is believed that even to this day, child sexual abuse occurs at a higher frequency than what is reported to authorities. A number of children are too fearful to report the sexual abuse, may not recognize the actions as improper, or lack the communication skills needed to reveal what is taking place. It is important to note that children who have been sexually abused often are silent about the victimization. Silence may be due to direct threats against them or a sense of shame or confusion about being targeted for the abuse.

Child sexual abuse is often identified in a medical setting when the child presents with complaints associated with the anogenital region. Common signs of child sexual abuse in females include bleeding, pain, swelling, genital discharge, dysuria, and vaginal lacerations. Injuries to male genitalia are seen less frequently. Sexually transmitted diseases are seen in approximately 10–15 % of sexually abused children.

Child sexual abuse is considered to be a worldwide problem. It is believed that sexual abuse increases in frequency within countries that experience economic hardships (Willias & Lewis, 2002). The rates of child sexual abuse

vary across nations from approximately 30 % among adolescent females in South Africa (Jewkes & Abrahams, 2002), 10–20 % of females in European countries (Svedin, Back, & Soderback, 2002), 15–32 % in the United States (Mart, 2010), and 20–37 % in Australia (Hunt & Walsh, 2011). It is believed that approximately 1 % of children in the United States are sexually abused annually. Out of two million annual cases of child abuse in the United States up to 40 % involve sexual abuse. Up to 80 % of the sexual abuse cases involve females and come from all socioeconomic levels in the United States.

The period of highest risk for child sexual abuse appears to be around the ages of 7–12 years of age (Chueng & Boutte-Queen, 2010) with young females being at greatest risk. Clinical evidence suggests that parents are the most frequent perpetrators of child sexual abuse and account for approximately 50 % of all cases while other relatives account for approximately 20 % of the perpetrators (Babatsikos, 2010). Unrelated perpetrators of sexual abuse typically prefer to identify vulnerable children who are considered to be innocent or trusting, lacking in confidence or self esteem, or are seen as "pretty" (Johnson, 2004). Sexual abuse is often accompanied with the use of drugs, alcohol, pornography, or gift giving as a means to produce disinhibition in the child. Many perpetrators also instill fear through the use of direct threats of physical violence against the child, family pets, or loved ones in order to assure compliance from the victim.

Historically, the sexual abuse of children has been described throughout history in various forms of violence and aggression. But it was not until the beginnings of psychoanalysis that it became a topic of scientific and medical inquiry (Demause, 1974). Clinical attention toward child sexual abuse was initially associated with the observations from Sigmund Freud who noted that many of his patients reported having been sexually molested as children (Freud, 1896/1962). Based upon his observations, Freud proposed the seduction theory as a major cause of psychiatric disorders specifically what he identified as the neuroses.

Awareness of child sexual abuse was later increased with the publication of a series of reports on sexual behavior completed in the 1940s and 1950s (Kinsey, Pomeroy, Martin, & Gebhardt, 1953). These surveys of sexual behavior revealed that a substantial number of adults had experienced sexual abuse as children. But it was not until the 1960s that child sexual abuse came firmly into the public eye with the publication of *Battered Child Syndrome* (Kempe, Silverman, Steele, Droegemuller, & Silver, 1962). Today, this publication is credited with causing the public outcry that led to the establishment of mandatory child abuse reporting laws that are now standard in all 50 states. All states have identified certain health-care professionals such as physicians and psychologists as mandatory reporters of suspected child sexual abuse.

The 1970s saw a dramatic flood of scientific case reports published in professional journals on the various forms of child sexual abuse. These initial journal articles presented anecdotal accounts of child sexual abuse garnered from patient encounters during psychotherapeutic and psychiatric services. These early publications began the process of identifying the signs and symptoms of sexual abuse as seen among children who have been abused.

Currently, there are well-established protocols that assist in the identification and reporting of sexual abuse cases to child protective services. These protocols recognize that sexual abuse of children remains a serious and continuing problem in the United States and other countries around the world. The guidelines for identifying child sexual abuse emphasize the need to establish rapport with the child and conduct structured interviews to uncover abuse (Mart, 2010). Common signs and symptoms found among children who have been sexually abused include sleep disturbances, complaints of pain and illness, low ▶ self-worth, fears about the future, school problems, discipline problems, acting in a sexually precocious fashion, or regressing to childlike behaviors.

Child sexual abuse has been found to be related to a number of negative long-term consequences. Children who have been targets of

sexual abuse compared to a non-abused group show a greater incidence of anxiety disorders such as generalized anxiety disorder, depressive disorders, behavior disorders, phobic reactions, and deficits in cognitive development (Hunt & Walsh, 2011). The emotional distress experienced as children can continue to exert negative consequences into adulthood. Adult survivors of abuse often exhibit a distrust of authority figures, engage in self-neglect or self-destructive behavior, have excessive worry about personal safety, and have high dependency needs.

Cross-References

- ▶ Anxiety Disorders
- ▶ Child Maltreatment: Sexual Abuse
- ▶ Fears
- ▶ Self-worth

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Child Soldiers

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Synonyms

Boy soldier; Child combatant

Definition

"A child soldier is any person under 18 years of age who is a member of or attached to the armed forces or an armed group, whether or not there is an armed conflict. Child soldiers may perform tasks ranging from direct participation in combat; military activities such as scouting, spying, sabotage, acting as decoys, couriers or guards; training, drill and other preparations; support functions such as portering and domestic tasks; sexual slavery and forced labour" (United Nations Cyberschoolbus, citing Coalition to Stop the Use of Child Soldiers *Child Soldiers Global Report* 2004, p. 15 http://cyberschoolbus.un.org/childsoldiers/webquest/teachers1.asp).

Description

The contemporary concern with child soldiers developed in the late twentieth century as rebel movements, notably (but not exclusively) in Africa, engaged under-18s for combat roles. Reports suggested that young people were the

unwilling victims of a new phenomenon of the modern world: an estimated 300,000 children (Machel, 2001) had their quality of life and future prospects destroyed. Chilling photographs of children carrying semiautomatic weapons accompanied stories of forced recruitment through such techniques as having children kill family and friends (thus isolating them from their communities). Young girls suffered severe sexual abuse as "bush wives." A rising tide of public opinion, fueled by the Machel Report (1996), culminated in the United Nations' Optional Protocol to the Convention on the Rights of the Child on the Involvement of Children in Armed Conflict (United Nations, 2000). The Optional Protocol prohibits states from compulsory recruitment for military service of people younger than 18 years of age and further calls for an absolute prohibition of non-state armed groups from using under-18s in hostilities. As of 2012, 139 states have ratified this Protocol while 53 have not (Zero under 18: http://zerounder18.org/Default.aspx?tabid=829).

The blanket prohibition on child soldiers rests on some assumptions that may be debated. They include the nature of childhood, the accepted roles of children in different cultures, and the ability of children to make rational choices and act with volition.

As Korbin (2003) points out, childhood is not experienced similarly everywhere. There is no one-size-fits-all definition of childhood across time and space. Childhood has specific cultural meanings (West, 2000). Attempts to impose a universal definition amount to a transnational restructuring of age categories (Rosen, 2007). Archaeology (the study of ancient cultures) and anthropology (the study of contemporary cultures) lead us to question whether "child as combatant" is a product only of the modern world. Bronze and Iron Age burials containing children interred with weapons suggest that children fought in the past (Wileman, 2009). Ethnographic studies of cultures as diverse as the cattle-herding Dinka of the Sudan (Deng, 1972) and the swidden horticulturalist Enga of the Papua New Guinea Highlands (Meggitt, 1977) illustrate the socialization and integration of boys as warriors. "Boy soldiers" were respected during the American Civil War (Rosen, 2005). Social and historical setting is important in defining what is appropriate behavior for a young person in the context of ▶ war.

In the modern context, the idea that children cannot make rational choices (Machel, 2001) informs perspectives on child soldiers and international legislation regarding their treatment and culpability. Children are portrayed as victims of adult abuse and manipulation. However, evidence suggests that young combatants often made rational choices and knew what they were fighting for. For instance, many young Jewish partisans and resistance fighters in Nazi Europe understood the stark reality they faced (Rosen, 2005). Women and girls in Frelimo's "Female Detachment" in Mozambique found ▶ empowerment through their ideological commitment (West, 2000). The same held true for young people in Sierra Leone (Denov & MacLure, 2006; Wessells, 2005). Teso boys in Uganda saw themselves as fighting for a cause (de Berry, 2001). In contexts where they cannot escape warfare or oppression, young people may demonstrate volition and personal agency that leads them to become combatants.

War often destroys the quality of life for young people, reducing life to the basics of day-to-day survival and presenting significant risks of physical or mental trauma. Meaningful ▶ education and community socialization for a normal life are interrupted, or perhaps never properly started. The young combatants of the late twentieth and early twenty-first centuries, often forcibly recruited by brutal and inhumane means, present a reintegration challenge for cash-strapped governments and traumatized communities. Treating former child soldiers as active participants in the process of reconstruction and reintegration, not merely passive objects of assistance, is instrumental in the process of restoring an acceptable quality of life. Local contexts of reintegration must be understood (de Berry, 2001); reintegration programs need to be culture and location specific (Wessells, 2005); the former combatants must be heard, and not remarginalized (Denov & MacLure, 2006). Appropriately

designed reintegration programs that meet specific community and cultural needs can and do work (Boothby, 2006; Wessells, 2005). One danger of the current internationalized approach to child soldiers and post-conflict situations lies in completely absolving child soldiers of any responsibility for their actions, thus undermining meaningful local legal and political solutions that could restore and re-empower local communities (Rosen, 2007).

Cross-References

▶ War

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Child Timing Desire in Australia

▶ Childbearing Desires Among Australian Women

Child Watch

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Synonyms

Children's rights; Global child watch

Definition

Child watch refers to the set of institutions, policies, and practices aimed at enhancing the quality of the life of children by promoting an environment in which they can develop their abilities and potential.

Description

The set of structures and obligations that constitute the global child watch mandate was established by the international community

through a series of regional and international activities, most fundamentally the UN Convention on the Rights of the Child, 1989, (CRC) and the monitoring and implementation system established under its terms (James & James, 2008; Kaufman & Rizzini, 2002, 2009). As early as 1924 the Declaration of the Rights of the Child affirmed that "the child, by reason of his physical and mental immaturity, needs special safeguards and care, including appropriate legal protection, before as well as after birth" and global consensus had advanced so dramatically that the CRC asserted, in the preamble, that "the full and harmonious development" of each child's personality required an "atmosphere of happiness, love and understanding. . .." Further legal instruments and provisions that contribute to the content of child watch norms include Articles 7 and 17 in the European Social Charter (1961), Articles 16 and 19 of the American Convention on Human Rights (1969) and Article 13 of the protocol to that convention (1988), the African Charter on the Rights and Welfare of the Child (1990) and its monitoring arrangement, The Riyadh Guidelines (1990), and The Beijing Rules (1985).

Child watch recognizes that children's well-being ultimately rests in hands of the people that they encounter in their daily lives, their family and community members in educational, recreational, religious, and commercial settings. Since any child may be subjected to compromises to his or her safety and may encounter obstacles to healthy growth and development, the spread of global consensus, the emergence of child watch policies, and the construction of procedures for their implementation are crucial steps in advancing the quality of children's lives (Casas, 1998; Tonon, 2008). Yet, researchers and practitioners are especially concerned about children who live in contexts of vulnerability (Earls, 2011; Rizzini, 2011). The contexts will vary but some of the more visible include the following: children subject to abuse and neglect, exploited for their labor or sexual purposes, victimized by war and drugs, forced into refugee camps, living away from family and community ties, coping with disabilities, and child members of marginalized groups.

In addition to the agreement in formal statements and laws aimed at laying out the right of children and youth to practices and policies aimed at protecting and promoting their well-being, there have been advances as well in national and international arrangements created to implement these legal and political objectives. For example, the CRC obligates governments to submit periodic reports to the Committee on the Rights of the Child detailing their efforts to implement the CRC; the committee also receives submissions, often critical of governmental action or inaction, from domestic groups that the committee uses in its questioning and recommendations. National child advocacy groups also work within and beyond borders in order to give meaning and real-life impact to the child watch system.

In spite of the very significant progress that has been made in legal and political efforts to improve the lives of children and thereby ensure advances in the quality of life of each child, the needs of too many children have only been minimally addressed. There is a clear global governmental consensus that children are entitled to a full range of human rights, a consensus reflected in the universal acceptance of the CRC, but a much greater commitment of time, energy, resources, and dedication will be required in order for child watch to fulfill the promise of genuinely improving the everyday lives of children.

Cross-References

- ▶ Active Citizenship
- ▶ At-Risk Children
- ▶ Basic Needs
- ▶ Child and Family Well-Being
- ▶ Child Care
- ▶ Child Development
- ▶ Child Maltreatment: Physical Abuse
- ▶ Child Maltreatment: Psychological Maltreatment

- Child Maltreatment: Sexual Abuse
- Child Participation
- Child Poverty
- Child Rights
- Child Sexual Abuse
- Child Well-Being
- Childhood Diseases and Disabilities
- Family Caregiving
- Human Rights
- Poverty
- Social Inequalities
- Violence
- Vulnerable Populations
- Youth Violence
- Youth/Adolescent Rights

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Child Well-Being

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Synonyms

Child happiness; Child quality of life

Definition

Child well-being is defined in many different ways, and this term is used by a wide range of practitioners, researchers, and policymakers. The UNICEF definition of child well-being is often used as a reference and takes a broad view of well-being: *"The true measure of a nation's standing is how well it attends to its children – their health and safety, their material security, their education and socialization, and their sense of being loved, valued, and included in the families and societies in which they are born"* (UNICEF, 2007). The UNICEF definition takes an ecological approach to child well-being, encompassing a child's life as a whole and recognizing that all childhood experiences will contribute to their overall well-being. In a broad sense, well-being describes the determinants of a good life for children, the promoters of growth and development, and factors that enhance a child's feelings of happiness and satisfaction with life. The concepts of well-being, happiness, life satisfaction, and quality of life are closely related, and the literature associated with these areas is partially overlapping. Here, we will address the concepts of child well-being, child subjective well-being, child quality of life, and child health-related quality of life.

Description

The literature on child well-being is largely concerned with the changing concept of well-being and the movement from a child-saving to a child-development approach, or from child welfare to child well-being (Ben-Arieh, 2010). These changes challenge efforts to produce appropriate indicators of child well-being in a society. The child indicator movement stems from the social indicators movement and is concerned with describing the condition of children, monitoring child outcomes, setting goals, and informing and shaping public policy. During the past decade, there have been several major shifts in child indicators. The most prominent shifts were as follows: from looking at survival to focusing on child well-being, from focusing primarily on negative outcomes to including positive outcomes, from focusing on a child's future well-being to valuing their current well-being, and from an adult perspective to a child perspective, including children's rights and viewing children as shapers of their own lives who influence their own well-being by participation (Aldgate, 2010; Ben-Arieh, 2010). The UNICEF definition of child well-being uses indicators in six dimensions: material well-being, health and safety, educational well-being, family and peer relationships, behavior and risks, and subjective well-being. For most of these dimensions, good indicators are available that can be used to monitor progress over time, with the exception of subjective well-being (Bradshaw, Rees, Keung, & Goswami, 2010).

Subjective well-being is a multidimensional construct that includes affective and cognitive components, and it further encompasses the experience of positive and negative emotions (Diener, 2009). Experiences of positive and negative emotions are associated, but they are not opposites, and happiness is a result of a balance between positive and negative affect. According to Diener (2009), only a small proportion of the variance in subjective well-being can be explained by objective life conditions, and the strongest predictor of subjective well-being is personality. However, it is also shown that different life circumstances can influence subjective well-being. Bradshaw, Rees, Keung, and Goswami (2011) claimed that child well-being could be a result of a dynamic relationship between personality traits and objective circumstances and these interactions may vary in time and space (context). When children were questioned about what constitutes their well-being and quality of life (QOL), important factors that emerged were their emotional well-being, being safe and cared for, being healthy, and their significant relationships with family and friends (Helseth & Misvær, 2010; McAuley, Morgan, & Rose, 2010).

The concept of health-related quality of life (HRQOL) was introduced to focus more narrowly on the effects of health, illness, and treatment on QOL. In recent years, there has been a growing recognition in research settings and clinical practice that it is important to study the HRQOL of children and adolescents. According to Ravens-Sieberer et al. (2006), HRQOL research in children has developed in several phases. Three main trends were suggested, where the first phase (from the late 1980s) was concerned with the theoretical concept of HRQOL in children and how this concept differed between children/adolescents and adults. In the second phase, which started in the early 1990s, there was a focus on methods and instrument development. The last phase, from 1995, has been characterized by a focus on the application of HRQOL as an outcome in epidemiological and clinical studies (Ravens-Sieberer et al., 2006). However, despite the increase in HRQOL research, few large representative studies of HRQOL have been conducted with children and adolescents in the general population. Several studies have been carried out with children and adolescents who are affected by cancer and chronic diseases. Moreover, fewer studies have been conducted with children in the 6–12 age group compared with adolescents (13–18 years) (Gerharz, Eiser, & Woodhouse, 2003). Studies report a lower HRQOL in girls compared with

boys, while the HRQOL was reported to be higher in younger children compared with older children (Haraldstad, Christophersen, Eide, Natvig, & Helseth, 2011).

There is a growing recognition that if we want to acquire knowledge about child well-being and QOL, we need to ask children directly about their own perceptions of health and well-being (Eiser & Morse, 2001; Frisén, 2007). However, measures of child subjective well-being and QOL should be sensitive to changes that occur during development. These developmental changes mean that age, reading ability, and emotional maturity must be integrated into measures (Riley, 2004; Bevans, Riley, Moon, & Forrest, 2010). Research has shown that children can reflect on their own life and there is a consensus that they can report their health and well-being from the age of eight years, provided that the questionnaire is suitable for a child's age and cognitive level (Riley, 2004). When measuring subjective well-being and QOL, certain dimensions and their dynamic interplay are more important and relevant for children, i.e., the context where a child lives (culture), their relationship to family and friends, their self-image, and personality. The WHO has developed guidelines for suggested domains related to QOL measures appropriate for children, which include family and social relationships, physical functioning, psychological well-being, physical appearance, and psychosocial relationships with social and material environments such as school, food, space, and material comfort (World Health Organisation [WHO], 1994). Several measures exist for child subjective well-being and children's QOL and HRQOL, which depend on how these concepts are defined and their purpose. HRQOL measures are increasing in number. Some are generic, while others are disease specific, and many capture good psychometric properties across cultures (Solans et al., 2008). However, indicators of subjective well-being used for monitoring child subjective well-being in a nation or society appear to be lacking, and they require further development (Bradshaw et al., 2010).

The starting point of this article was a broad definition of child well-being. We then moved on to focus more specifically on subjective well-being and quality of life, highlighting a variety of perspectives and definitions for this concept. The increased interest in child well-being across professions has led to a shift in our thinking regarding childhood and children. Children now have the right to participate in decisions and events that affect them, which means they have the ability to shape their own lives (UNICEF, 2007). Thus, children's voices need to be heard when their well-being is being assessed, whether that is in large surveys of child well-being in a society or in small research studies focused on the well-being or quality of life of specific groups of children. Learning more about how children experience, understand, and shape their own lives will contribute greatly to our knowledge of child well-being. This shift in focus toward *subjective* child well-being has been followed by a growing awareness of the need to include subjective accounts along with objective measures, as indicators of well-being. The growing interest in child indicators can partly be attributed to new methodological advances and new conceptual theories. Identifying key indicators and their relationships to outcomes or measures makes it possible to acquire a better understanding of child well-being, which helps to improve outcomes for children in a changing society. The concepts of well-being, subjective well-being, and quality of life are closely related and to some degree overlapping. To some extent, the many different ways of looking at child well-being complicate the picture and make it difficult to compare how children are performing across societies and in diverse child populations. However, the increasing interest at all levels (society, group, individual) shows there is a serious commitment to child well-being, particularly to the development of reliable and valid indicators of child well-being and the identification of factors that promote its improvement.

Cross-References

▶ Child and Adolescent Life Satisfaction

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Child Well-Being and Transnational Families

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Synonyms

Astronaut families; Left-behind children; Parachute children

Definition

Transnational families are families in which one or more members live in another country or region. The term "family members" usually refers to a nuclear family comprising parents and their children. Sometimes, elderly grandparents are also included. A broader array of family members is included in studies that take into account extended family systems prevalent in developing countries.

Transnational families have members who live for an extended period of time in different countries. For example, the research discussed here studies families living with members spread between the USA and Mexico, the Philippines and Italy, or Congo and Mali. An increasing body of literature studies internal Chinese migration. This migratory flow spans large geographic distances and involves administrative hurdles that

make it comparable to other cases of transnational families and is therefore included here.

▶ Child well-being is loosely defined in qualitative anthropological or sociological studies in terms of children's emotions and responses to living in a transnational family. Quantitative family sociology and child psychology studies define child well-being more narrowly in terms of emotional, behavioral, and ▶ health outcomes. Educational and economic outcomes for children are sometimes included. These latter two outcomes will be considered in this overview to the extent that they are included in findings on emotional, behavioral, or health outcomes.

Description

Introduction

Increasingly, migration has given rise to transnational families whose members live in different nation-states and face the challenges of organizing the care of family members across borders. Through this process, the roles and relationships between spouses, parents, children, and elderly relatives can change. An emerging concern in both the academic and policy arenas is in the effects of separation on migrant parents and their children. In most instances, one or both parents migrate, leaving one or more children in the country of origin to be raised by a local caregiver. In other cases, children migrate as unaccompanied minors, either clandestinely such as through the Mexico-US border or officially in pursuit of educational opportunities as in the case of Chinese children of migrant workers in Australia or the USA (Waters, 2005). Families and children in the latter circumstances are referred to as "astronaut families" or "parachute children." Most of the studies that focus on the well-being of children center on the more prevalent phenomenon of "left-behind" children, which is the focus of this essay.

Defining a New Field of Research

Transnational family studies have emerged since the turn of the twenty-first century and have focused on the consequences of living in transnational families for the relationship between children and their parents (Bryceson & Vuorela, 2002; Dreby, 2007; Parreñas, 2005; Schmalzbauer, 2004). These studies have focused on Latin America and Asia and are predominantly qualitative in nature. They have addressed questions of how long-distance separations affect the daily life of different-members of transnational families, the types of relationships they produce, and the ways in which gender and intergenerational relationships change as a result of the separation. Some studies focus specifically on the children's relationships with relevant others, such as the migrant parent, the caregiver at home who takes care of their daily needs, and others involved in the care network, such as aunts, uncles, and grandparents. While the initial focus of the studies was on eliciting information from parents, especially mothers, and their experiences with being separated from their children, later studies have focused on the children's own accounts (Dreby, 2007; Schmalzbauer, 2004). Most studies indicate that there are some negative consequences for children and parents, such as conflicts and depressive symptoms (Dreby, 2007; Fog-Olwig, 1999; Levitt, 2001; Parreñas, 2005) and behavioral problems such as joining gangs (Smith, 2006), loneliness, and feelings of abandonment (Dreby, 2007; Parreñas, 2005). Younger children are found to have more emotional difficulties dealing with separation from their biological parents than older ones, while the older children tend to show behavioral problems, such as drinking and rebellious behavior. These studies emphasize that how a child feels about living far from one or both biological parents depends on the quality of the relationship with the parent overseas; whether and how often they communicate; the quality of the relationship with the local caregiver, which includes how cared for a child feels; the support the child receives from the wider community or care network; and whether it is the mother or father who migrated. Virtually, all studies agree that children are worse off in terms of their ▶ emotional well-being when mothers migrate; however, mothers are found to remit more than fathers. Despite these nuances,

this literature tends to emphasize negative outcomes for children when their parents migrate (Yeoh & Lam, 2007).

While identifying some general dynamics, these studies focus solely on the phenomenon of transnational families without including control groups (Mazzucato & Schans, 2011). The question therefore remains: to what extent are the observed dynamics particular to transnational families or to what extent are they part of broader dynamics that pertain to other family types? Furthermore, the focus on the migratory status of children's parents in qualitative studies does not address the extent to which other factors might explain the observed effects on children. Are there characteristics common to transnational families other than parental migration that might explain the observed effects on children?

More recently, and largely independently of the above qualitative studies, scholars from family sociology and child psychology have turned their attention to the phenomenon of left-behind children. Before these studies, transnational family situations had been largely ignored in these disciplines. Much of the previous literature addressing parent–child separation is based primarily on clinical data and derives from studies that focus on parental divorce, death, or a problematic separation, such as abandonment. Family sociology and child psychology studies focus less on migrants' children, and when they did, they focused mainly on those children living with one or both of their parents in the migrant receiving country. The gaps in these disciplines were due to the guiding concept of the family, which emphasizes proximity as a prerequisite for meaningful interaction and exchange within families (Mazzucato & Schans, 2011). As a result, transnational family practices were ignored or assumed unfeasible (Baldassar & Baldock, 1999). Recently, however, there has been a shift in attention to transnational families, with many studies focusing on China and Latin America.

Important Analytical Categories

The recent shift in attention by quantitative researchers has led to a narrower definition of child well-being and has focused predominantly on emotional, behavioral, and health outcomes as well as educational and economic outcomes. These studies draw primarily from theories in family studies and child psychology, such as attachment theory or social cognitive theory, and they seek to test whether transnational families result in particular child well-being outcomes as compared to non-transnational families. Such studies are also designed to assess whether factors other than parents' migratory status might explain these outcomes. These studies have different and sometimes conflicting findings, depending on what outcome is focused upon, which region of the world is studied, and what variables are included. Here, we present some of the most important findings.

Who Migrates

Whether the father or mother migrates makes a difference for a child's well-being. In general, studies find that children are worse off when mothers migrate. Battistella and Conaco (1996) find that children in the Philippines with migrant mothers have more educational difficulties, decreased emotional well-being, and health problems. This is corroborated by Parrenas' (2005) qualitative study in the Philippines where this effect is found to be stronger for girls than for boys. Dreby and Stutz (2012) argue that educational aspirations are also affected, depending on which parent migrates. They find that when single mothers migrate, children's educational aspirations are higher because they see their mother's migration as a sacrifice and want to reward her through their good educational achievement. The opposite is true when both parents or only fathers migrate. Some of the mechanisms at work are explained by Kandel and Massey (2002), who find that Mexican children aim to join their migrant parents in the USA and perceive their Mexican education as irrelevant in this process, thus lowering their motivation.

While much of the literature focuses on mother-child relationships, Nobels (2011) expressly makes a distinction between absence due to migration and absence due to divorce. Mexican migrant fathers are more present in left-behind children's

lives via communication technologies than divorced fathers. She finds that the frequency of interaction is correlated with better schooling outcomes, which attests not only to the significance of paternal migration but also to the importance of communication between the parent and child during the migration process.

Some of the most recent and interesting studies come from China. In their study of Chinese left-behind children, Wen and Lin (2012) make a distinction between migrating parents. Similar to the Mexican case, they find that children left behind by migrant mothers show worse health behavior and less engagement with school than those whose fathers migrated. Overall, in these respects, both types of children are worse off relative to non-left-behind children.

Few studies define the role of migrant parents in ways other than their biological relationship to the child (i.e., mother/father). However, given the findings from qualitative transnational family literature that identify the importance of the quality of the relationship between migrant parents and their left-behind children, this is an important area to investigate. Heymann et al. (2009), for example, look at whether the migrant family member formerly occupied a primary caregiver role before migrating, and they find that there are no negative well-being consequences for left-behind children if the migrant family member was not a primary caregiver. The primary caregiver could be a sibling or an aunt or one of the biological parents. However, if the migrant family member was a primary caregiver, then children were more frequently and chronically ill and had more emotional and behavioral problems.

The Characteristics of the Caregiver

The relationship between a child and a migrant parent is important as well as the relationship between a child and a caregiver. This relationship has been the subject of family and child psychology studies, but only as it relates to separated families living in the West. In the case of transnational families, this has recently been explored and represents a new direction for well-being studies of left-behind children. Jia and Tian (2010) find that Chinese children left by their parents are at higher risk of being lonely and therefore are at risk for low mental health when their caregiver is a grandparent, among other factors. Fan, Su, Gill, and Birmaher (2010) compare Chinese left-behind children and find that there are differences between children who are cared for by a relative, a nonrelative, and those who live with their biological parents after a period of separation. Children whose caregivers are nonrelatives are at the greatest risk of showing emotional and behavioral problems. Qualitative transnational family studies point to the importance of caregivers in helping children to experience parental absence in a positive way. This area of study, in which distinctions are made in caregiver types, is a potentially productive area for future quantitative research.

Nonmigratory Characteristics

Some of the most recent studies investigate other potential factors that could contribute to observed outcomes on child well-being in transnational families. Wen and Lin (2012) base their study in social cognitive theory and find that a child's psychosocial environment, defined by the family's socioeconomic status, peer and school support, and the child's psychological traits and socializing skills, is more important in explaining their findings of decreased health behavior and school engagement among left-behind children than the parents' migratory status. Furthermore, they find no evidence of decreased emotional well-being among left-behind children. Fan et al. (2010) note that left-behind children show more psychopathological and less pro-social behavior than their counterparts who live with their biological parents. Yet, these differences disappear after controlling for age, education levels, and the socioeconomic status of parents and caregivers and teacher involvement. The authors show that left-behind children tend to come from poorer families with older and less-educated caregivers, and it is these factors, more than the parental separation, per se, that influence the negative emotional well-being among left-behind children.

These findings help to provide nuance for the discussion of left-behind children, which tends to be negatively framed in ways such that

left-behind children are portrayed as always being at a disadvantage (Yeoh & Lam, 2007). These findings show that other factors can be at least as important, if not more so, than parental migratory status in influencing the well-being of left-behind children. In some cases, these other factors explain the variations in well-being that have been associated with living in a transnational family.

The Importance of Time

For transnational families, time is an important dimension in various respects. First, the length of separation between children and their parents and the age of the child at separation are important in determining the effects of migration on children. Studies find more psychopathology and greater ▶ anxiety and depression levels among children who experience a longer separation (Fan et al., 2010) and who were separated from their parents at a younger age (Fan et al., 2010; Liu and Ge 2009). Second, mediating factors are affected by the length of separation between children and parents. Attachment theory posits that the psychological well-being of a child is determined by the level of parent–child bonding; the less bonding, the worse the psychological well-being of children. Smith, Lanlonde, and Johnson (2004) find that migration can disrupt parent–child bonding, and this disruption leads to negative psychological outcomes for children.

A third way in which time is important for transnational families is that children's well-being in the present may be dependent on things that happened before or during the migration of their parents. Indeed, once children are reunited with their parents, such effects can continue to operate or change. Both Smith et al. (2004) and Suárez-Orozco, Todorova, and Louie (2002) find that the time after reunion does not necessarily repair parent–child relationships. In fact, Dreby (2007) shows how reunion itself can increase conflicts and tensions between parents and children when children feel torn away from the caregivers with whom they had bonded or are suddenly faced with an authority figure they no longer recognize.

The stage of the parent's migration trajectory can also be of relevance. Donato, Kanaiaupuni, and Stainback (2003) find that Mexican girls' health outcomes become more equal to those of boys when one or both parents are currently on migration. However, when the parent returns to Mexico from the USA, they no longer find this health benefit for girls, suggesting that upon return, girls' health outcomes worsen. This finding is corroborated by Antman (2011) who looks at the division of household resources between girls and boys while their fathers are away on migration. She finds that girls receive a larger share of household resources while fathers are away, but when fathers return, the household resources revert to the boys. Girls' health outcomes become more equal to those of boys when one or both parents are away on migration; however, they do not find this outcome for children whose parents have returned

Cross-Country Comparisons: Policy and Cultural Contexts

There are very few studies that compare child well-being across countries. Graham and Jordan (2011) are the only ones to our knowledge who have compared different migrant-sending countries. They compare well-being outcomes for children in four countries in Southeast Asia and find that children of migrant fathers are more likely to have poor psychological well-being in Indonesia and Thailand but not in the Philippines or Vietnam. Possible explanations for these differences are because parental migration in Vietnam is a relatively recent phenomenon, while the issue of left-behind children in the Philippines has been in place long enough to have received attention from government and nongovernmental agencies, resulting in specific programs that address their needs. In some cases, especially as recorded in African contexts, cultural ▶ norms around family and child rearing may lead parents to prefer to leave or send their children back to their countries of origin (Bledsoe & Sow, 2011; Whitehouse, 2009). These explanations attest to the importance of policy and cultural contextual factors and the importance of including them in models of the effects of parental migration on child well-being (Mazzucato & Schans, 2011). In countries where migration is more established and the condition of children living without one or both parents due to

migration is more common, there may be no social stigma associated with being a left-behind child and more programs that aim to help caregivers or schools to better address their needs.

Discussion and Conclusion

Important developments have been made in the study of transnational families and child well-being since the inception of transnational family studies at the turn of the twenty-first century. Qualitative studies have drawn the attention of scholars to the increasing phenomenon of families operating across nation-state or regional borders, raising the question what impact this has for different family members. Qualitative accounts of different family members indicate that children tend to suffer from separation from their parents, yet various factors affect the severity of these outcomes, such as the quality of the relationship between children and parent both before and during migration, the quality of the relationship between children and the left-behind caregiver, and the frequency of communication between children and parents. More recently, scholars from family and child psychology studies have pursued the question of the effects of migration-induced separation on children using quantitative approaches. Important elements of these studies show that the migrant's relationship to the child (mother vs. father, primary caregiver vs. non-caregiver) and the characteristics of the caregiver (grandparent, nonrelative) are important in determining the effects on child well-being.

Another important development is the inclusion of ▶ control groups of children who live with both of their parents. Such control groups allow for the exploration of the degree to which the negative findings on child well-being in transnational families are due to migration or to other characteristics. Factors, such as socioeconomic status and the educational background of parents and caregivers, are found to be as important if not more important in explaining child well-being outcomes. This is an important recent contribution to the literature as it points to the need to focus the discussions around left-behind children, which, until recently, have tended to be framed in negative terms due to the lack of specific analysis controlling for various factors. Furthermore, the findings indicate the need to search for policy solutions not only directed at migration but also at helping parents to find optimal caregivers and to provide adequate support services for those who stay behind to care for their children.

The findings that time is an important dimension that influences child well-being outcomes underscore the need for longitudinal studies. Currently, all studies on transnational families and child well-being are cross-sectional. Those that include time dimensions do so by including variables such as length of separation and age at separation or they rely on historical recall. Longitudinal studies are needed to identify the conditions of the family before migration to accurately account for possible selection effects and to obtain measurements over time of child well-being outcome variables to establish whether migration does impact child well-being and what it means for future child development.

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Child Well-Being Index

▶ Child and Youth Well-Being Index (CWI)

Childbearing

▶ Pregnancy, an Overview

Childbearing Behaviors in Australia

▶ Childbearing Desires Among Australian Women

Childbearing Desires Among Australian Women

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Synonyms

Baby hunger and Australian women; Child number desires in Australia; Child timing desire in Australia; Childbearing behaviors in Australia; Childbearing expectations in Australia; Childbearing ideals in Australia; Childbearing intentions in Australia; Childbearing preferences in Australia; Family size desires in Australia

Definition

Desires are psychological states that represent what an individual wishes for and are influenced primarily by factors internal to the individual such as motivations, ▶ attitudes, and beliefs. With respect to childbearing, they can include the desire to have a(nother) child (childbearing desires), the desire for a certain number of children (child number desires), and the desire to have a child at a certain time (child timing desires). Desires do not generally lead directly into action. Instead they are translated into intentions which are psychological states that represent what an individual actually plans to do. Intentions are based on desires but take into consideration the perceived desires of significant others and what can actually be achieved given situational constraints. Childbearing intentions lead to childbearing behaviors (Miller, 1994; Miller & Pasta, 1995).

Description

Why Do Women Want Children?

The desire to have children is assumed to be universal with most societies being essentially pronatalist in that childbearing is usually encouraged and childlessness stigmatized, and parenthood is generally viewed as inherently positive and desirable and a central life goal (Hagewen & Morgan, 2005; Veevers, 1973).

The motives behind human procreation have been the subject of much speculation (van Balen & Trimbos-Kemper, 1995). A number of theoretical approaches have been suggested to explain why women want children including a biological drive to have children (Heiland, Prskawetz, & Sanderson, 2008) and psychosocial explanations of the desire for motherhood such as the "value of children" (Hoffman, Thornton, & Manis, 1978), the "social capital of children" (Schoen, Kim, Nathanson, Fields, & Astone, 1997), and the "structural value of children" (Bühler, 2008). Although rarely discussed in the scholarly literature, much popular attention (e.g., books (Davitz, 1984; Hewlett, 2002) and media articles (Marsh, 2010)) has been given to "baby hunger," an unexplained powerful longing or desire to have a child, as a reason for women wanting to have children.

Although existing studies have taken different theoretical approaches, the motivation for childbearing appears to be multidimensional. Children are viewed as valuable for more than one reason and those reasons may be interrelated (Kohlmann, 2002). Overall, the evidence suggests that there are three main benefits of children to their parents: the psychological value which is the ability of children to provide ▶ positive affect (emotional ties), the social value which is their capacity to provide social status (position in society) and behavioral confirmation (social relationships with "relevant others," not restricted just to the family or close relatives, but including friends, who give behavioral confirmation when individuals do the "right thing"), and the economic value of children which is their ability to provide economic security for the family (Kohlmann, 2002).

Despite the lack of a consistent theoretical approach which explains why women want children, it appears that the motives for children are multidimensional, and in countries such as Australia, women mostly desire children for psychological and social reasons not financial ones (Holton, Rowe, & Fisher, 2011). In particular, Australian women value children for the ▶ love, companionship, ▶ happiness and fulfillment they provide, and a confirmation of their female identity (Holton et al., 2011).

Women's Childbearing Desires

Childbearing is typically conceptualized as the outcome of a rational decision-making process that involves a number of components, such as age, fecundity, partnership status, control over contraception and chance, and a person's desire or preference for children (Heiland et al., 2008). Childbearing desires have been regarded as an important dimension of attained fertility especially in high-income countries such as Australia where there is less concern over unintended conception given relatively easy access to safe and effective contraception and abortion (Heiland et al., 2008), including for women who are not in formalized partnerships.

Several related concepts have been used to measure childbearing preferences: "ideals," "desires," "intentions," and "expectations" (Testa & Grilli, 2006). These have been regarded as conceptually important and examined in theories and studies of fertility decision-making due to their role in connecting individual attitudes and circumstances to behavior (Quesnel-Vallée & Morgan, 2003; Testa & Grilli, 2006; Weston, Qu, Parker, & Alexander, 2004).

Many high-income countries such as Australia have experienced a decline in fertility rates to below replacement level over the previous few decades. Replacement level fertility is the number of babies a woman would need to have over her reproductive life span to replace herself and her partner. Replacement level fertility is estimated at around 2.1 babies per woman (Australian Bureau of Statistics, 2011).

Concern regarding the low fertility rate in countries such as Australia has resulted in a number of investigations into whether or not women want children. These have found that most women desire children and voluntary ▶ childlessness is uncommon (Holton et al., 2011; Weston et al., 2004).

The number of children desired by individuals, often referred to as child number or family size desires, has been one of the main hypothesized predictors of the actual number of children born (Miller & Pasta, 1993). As a result, child number desires are often gathered as part of fertility surveys, but there are often differences between studies in terms of how the question is framed. Participants are usually asked either about the number of children "an average family" or a "family like yours" would desire (i.e., societal ideal family size) or what the individual would like for themselves (i.e., personal ideal family size) (Testa & Grilli, 2006).

Most Australian women desire two or three children (Holton et al., 2011). Very small families, of none or one child, and very large families (e.g., of five children or more) are not perceived to be the ideal in high-income countries such as Australia (Evans & Kelley, 1999; VandenHeuvel, 1991).

Childbearing Outcomes

Due to the decline in fertility rates in many high-income countries, much recent fertility research has focused on why women restrict their childbearing. Australia's low fertility rate is commonly attributed to deliberate decisions by women to avoid having children because they want to pursue personal ambitions or hedonistic activities like travel and that women have little desire to have children.

Nevertheless, a recent study of a population-based sample of 569 30–34-year-old Australian women's childbearing desires, outcomes, and expectations found that most women in the sample wanted children, and the majority (71 %) desired two or three children (Holton et al., 2011). However, on average the number of children participants currently had was one, and most women (80 %) at the time of being surveyed had fewer children than they desired. The age range of the participants made it unlikely that most would have completed their childbearing given that they are not yet at the end of their reproductive years and the current trend in Australia is for childbearing at later ages. Yet when asked if they were likely to have (more) children in the future, more than half of the women (54 %) said they were unlikely to.

The childbearing outcomes of the women in this Australian study were associated with a diverse range of biological, psychological, and social factors (Holton et al., 2011). Many of the reasons which women identified as barriers to having children including adverse health conditions, not having a partner, having an unstable relationship with their partner or a partner unwilling to commit to fatherhood, housing concerns, and job insecurity had prevented them from achieving their ideal childbearing desires. Many women reported that they would have children, or more children, if their circumstances were different. These data challenge prevailing assumptions that women are able to choose when and if they have a child and suggest that women's childbearing outcomes are not always voluntary and are often constrained or influenced by their actual and perceived circumstances.

The Gap Between Childbearing Desires, Intentions, and Outcomes

The fall in fertility rates has prompted population researchers to examine the association between childbearing intentions and behavior as a discrepancy between intended and achieved family size could demonstrate the existence of an "unmet need" for children (Heiland et al., 2008). Childbearing intentions have been used to predict the future fertility of cohorts and to assess an individual's ability to realize their childbearing desires. This provides an insight into fertility decision-making and the factors that impact on individuals' capacity to realize their intentions (Quesnel-Vallée & Morgan, 2003).

Comparisons of childbearing desires, intentions and expectations, and actual childbearing outcomes can shed light on childbearing behavior (Bongaarts, 2002). The average ideal number of children desired by Australian women (2–3) (Holton et al., 2011) is higher than the current Australian fertility rate (1.89) (Australian Bureau of Statistics, 2011) and the replacement fertility rate (2.1).

The competing demands of paid employment and children, relationship breakdown, not having a partner or partner being unwilling to father a child, disagreement among partners, a partner's previous biological children, as well as fertility difficulties due to delaying having children mean that many women do not have as many children as they ideally want (Holton et al., 2011; Quesnel-Vallée & Morgan, 2003; Stewart, 2002). Accordingly, Australia's low and below replacement fertility rate is likely to be an unintended rather than a planned outcome of women's childbearing behavior and is not an accurate reflection of individual women's preferences regarding their ideal number of children.

Therefore, although most women want to have children (Holton et al., 2011; Weston et al., 2004), there is often a gap between women's desired number of children and the number of children they actually have with many women having fewer children than they desire (Goldstein, Lutz, & Testa, 2003; Holton et al., 2011; Quesnel-Vallée & Morgan, 2003; Weston et al., 2004).

This divergence between childbearing preferences and actual fertility suggests that childbearing desires are not always strong predictors of childbearing outcomes, and many women will not achieve their childbearing desires. So while childbearing preferences are central to understanding levels of fertility and women's attitudes to future childbearing, it appears they do not completely determine these levels (Hagewen & Morgan, 2005).

Childbearing Desires and Women's Quality of Life

▶ Quality of life is defined by the World Health Organization (1997) as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns."

A relationship has been found between women's global ▶ emotional well-being and their childbearing desires, outcomes, and expectations. Mothers have been found to have significantly better mental health than childless women (Holton, Fisher, & Rowe, 2010). It has been suggested that women whose role status fits their preferences will have lower psychological ▶ distress than women whose status does not fit their preferences (Connidis & McMullin, 1993; Koropeckyj-Cox, 2002; Wethington & Kessler, 1989). Accordingly, for women who desire children and become mothers, the emotional stresses often associated with being the parent of a young child may be less pronounced or offset (Scott & Alwin, 1989; Umberson, 1989).

In contrast, women who do not have children and regard their childlessness as problematic, and their situation as one of circumstance rather than choice, may be more likely to experience diminished psychological well-being and experience tension or distress (Connidis & McMullin, 1993; Vissing, 2002). Brandtstädter and Rothermund (2002) argue that when goals to which a person is strongly committed become unfeasible or they have no control over achieving them, a situation arises that precipitates hopelessness and depression. A perceived loss of agency, especially over core relationships and life goals, has been identified as a risk factor for depression (Astbury & Cabral, 2000).

Conclusion

Motherhood is associated with enhanced mental health for women (Holton et al., 2010). It appears that there may be social and psychological benefits to women in having children. Children may benefit women's lives through personal growth, fulfillment, ▶ self-esteem, satisfaction, a sense of meaning and purpose, and social ties as children may strengthen or broaden their mothers' ▶ social networks to a wide range of people and community institutions such as relatives, friends, neighbors, schools, and religious organizations (Nomaguchi & Milkie, 2003; Schoen et al., 1997; Umberson & Gove, 1989). Having children also allows women to fulfill an expected adult role and can symbolize the achievement of adult status and femininity (Callan, 1983; Nomaguchi & Milkie, 2003; Umberson & Gove, 1989).

Nevertheless, although most women want to have children, they often have fewer children than they desire, and many would have children, or more children, if their circumstances were different (Holton et al., 2011). There are a number of implications of these findings, especially given the current trend in countries such as Australia toward later motherhood. When women delay childbearing, it reduces the remaining length of time in which they can have babies, generally leading to an increased level of childlessness (Australian Bureau of Statistics, 2007; Gray, Qu, & Weston, 2008). Increasing levels of childlessness and the often negative relationship between women's childlessness and their quality of life suggest that women's mental health research, policy, and practice should address the mental health care needs of women of childbearing age who do not currently have children particularly those who would prefer to have them (Holton et al., 2010).

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Childbearing Expectations in Australia

▶ Childbearing Desires Among Australian Women

Childbearing Ideals in Australia

▶ Childbearing Desires Among Australian Women

Childbearing Intentions in Australia

▶ Childbearing Desires Among Australian Women

Childbearing Preferences in Australia

▶ Childbearing Desires Among Australian Women

Childfree (Term Used in Movement of Voluntary Childless People)

▶ Childlessness

Child-Headed Family

▶ Family Structure

Childhood Anxiety

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Synonyms

Anxiety, social; Fear in children; Generalized anxiety in children; Phobias in children; Separation anxiety

Definition

Childhood anxiety disorders refer to a group of disorders characterized by the presence of severe, persistent, and impairing fear or ▶ worry that causes significant ▶ distress and impairment in functioning. The Diagnostic and Statistical Manual for Mental Disorders, 4th Edition, Text Revised (DSM-IV-TR; American Psychiatric Association, 2000), is a commonly used classification system for determining the clinical significance of ▶ anxiety and outlines the diagnostic criteria for each disorder. This review focuses on the three most common anxiety disorders during childhood: separation anxiety disorder, generalized anxiety disorder, and social phobia.

Description

Historically, childhood fears and anxiety were seen as transient and harmless, leaving them neglected by researchers and overlooked by parents, teachers, and mental health practitioners. However, over the past two decades, a wealth of studies examining the ▶ prevalence and clinical characteristics of childhood anxiety have dispelled these myths. Although some degree of fear and anxiety are considered part of normal development and aid in survival, excessive anxiety is now conceptualized as an enduring trait that can produce serious adverse consequences for children and their families. A diagnosis of an anxiety disorder may be warranted when a child's anxiety becomes clinically significant, that is, the level of anxiety is severe and the symptoms are persistent and significantly negatively impact daily functioning.

As a group, childhood anxiety disorders are among the most common pediatric psychiatric illnesses and affect approximately 10 % of youth (Costello, Egger, & Angold, 2004). Large-scale epidemiological surveys suggest that these disorders carry a lifetime prevalence rate of 29 % and typically develop during childhood and early adolescence (Kessler et al., 2005). Although findings are mixed with respect to gender differences, recent population based surveys indicate that the occurrence of anxiety disorders is similar for boys and girls. Pediatric anxiety disorders rarely occur in isolation and tend to be highly comorbid with other anxiety and affective disorders (see Curry, March, & Hervey, 2004 for a review). Such high rates of comorbidity have raised questions regarding the appropriateness of current approaches to classification and nomenclature, diagnostic accuracy, and the potential for shared etiology. Without treatment, pediatric anxiety disorders may persist into adulthood and increase the occurrence of adult anxiety, depression, ▶ substance abuse, and suicide attempts (e.g., Muroff & Ross, 2011). The prevalence and impairment associated with these disorders highlights the importance of early detection and intervention.

Typical Symptom Presentation

Separation anxiety disorder (SAD) is characterized by excessive concerns regarding separation from home or from attachment figures. Children with SAD have a persistent, and often unrealistic, fear that they or their parents will suffer harm when separated. These children are likely to be reluctant or refuse to engage in activities that require separation, such as attending school, field trips, play dates, parties, sleepovers, or being left with a babysitter. They may appear excessively clingy, seek reassurance from caregivers, have difficulty sleeping independently, and complain of physical symptoms such as headaches and stomachaches.

Social phobia (SOP) may be present in children who demonstrate a marked and consistent fear of social or performance situations with peers. These children tend to overestimate the likelihood and impact of negative social evaluation, criticism, and being embarrassed. As a result, children with SOP often avoid peer interactions or performance situations such as attending school, public speaking, social gatherings, participating in class, initiating conversations, eating in front of others, and joining clubs or sports teams. When faced with an anxiety-provoking social situation, children with SOP may experience intense distress, panic-like symptoms, and may freeze.

Generalized anxiety disorder (GAD) is characterized by excessive and persistent worry that is difficult to control. Children with GAD may have a variety of worries including, but not limited to, concerns regarding safety, performance, the future, friends, health, family, current events, and natural disasters. In response to worries, children with GAD may seek excessive reassurance, have problems with concentration, appear restless or irritable, and complain of physical symptoms (e.g., headaches, stomachaches, sleep problems, tension, and ► fatigue).

Impact on Quality of Life

Pediatric anxiety disorders negatively impact children's ► quality of life and self-image and impair functioning across a variety of contexts including the school, home, and social environments (see Muroff & Ross, 2011 for a review). Academically, children with anxiety disorders have high rates of school absences, lower academic achievement, and have an increased risk of grade retention and ► school dropout (e.g., Breslau, Lane, Sampson, & Kessler, 2008). With respect to family functioning, children with these disorders experience conflict with parents and siblings and disruption in daily routines (e.g., Hughes, Hedtke, & Kendall, 2008). Socially, children with anxiety disorders tend to have fewer friends, report less closeness in their friendships, experience more loneliness, and engage less frequently in recreational activities (e.g., Khalid-Khan, Santibanez, McMicken, & Rynn, 2007).

Development and Maintenance

Etiological models of pediatric anxiety propose a combination of genetic and environmental variables that contribute to the development and maintenance of these disorders. It is well established that anxiety disorders run in families (e.g., Schreier, Wittchen, Höfler, & Lieb, 2008). One explanation for the familial aggregation of these disorders is genetic transmission. Recent reviews concluded that genes account for approximately 30 % of the variance in child anxiety (Eley & Gregory, 2004). In light of the modest-to-moderate genetic contribution, a variety of environmental factors, such as attachment, temperament, parenting behaviors, and cognitive vulnerabilities have been identified as potential pathways to anxiety development (see Drake & Ginsburg, 2012; Rapee, 2012; Silverman & Field, 2011 for reviews). It is important to note that extant findings are largely mixed and firm conclusions regarding pathways to anxiety development are not yet possible as many questions remain unanswered. Notwithstanding, select environmental factors are briefly reviewed below.

Attachment refers to the quality of parent–child bond and is influenced by caregiver warmth and responsiveness. An insecure, or ambivalent, attachment style may increase the risk for developing anxiety disorders in general and social anxiety disorder in particular. Although the majority of youth with an insecure attachment do not develop an anxiety disorder, findings from recent reviews concluded that there is a significant, although moderate, relationship between an insecure attachment and child anxiety (Colonnesi et al., 2011). One factor that may exacerbate risk is a form of *temperament* known as behavioral inhibition (BI). Children with BI tend to be withdrawn, avoidant, and demonstrate heightened physiological arousal and fear of novel stimuli and may be vulnerable to anxiety. Current evidence suggests that BI is associated with anxiety disorders in general and social anxiety in particular (see Winter & Bienvenu, 2011 for a review). While most children with BI do not develop anxiety disorders, the vulnerability conferred by this temperament may be amplified in the context of certain parenting behaviors.

Emerging evidence suggests that children with BI have an increased risk for developing anxiety disorders when they are reared by parents who demonstrate low levels of warmth and high levels of criticism (Hudson, Dodd, & Bovopoulos, 2011). Indeed, a number of *parenting behaviors* have been identified as potential risk factors for anxiety development and/or maintenance. The most commonly studied dimensions of parenting that are hypothesized to be associated with child anxiety are overcontrol, warmth, criticism, and anxious modeling. Of these dimensions, parental overcontrol (also described as overprotective and restrictive) showed the strongest association with child anxiety (McLeod, Weisz, & Wood, 2007; Wood, McLeod, Sigman, Hwang, & Chu, 2003) and predicted anxiety overtime (Edwards, Rapee, & Kennedy, 2010; Ginsburg, Grover, & Ialongo, 2004). Similarly, parental criticism and rejection have been associated with anxiety disorders (Hudson et al., 2011) and have been shown to predict higher levels of child anxiety over time (Ginsburg et al., 2004). Recent reviews, however, have concluded that the association between parental criticism/rejection and child anxiety is relatively small (McLeod et al., 2007; Wood et al., 2003). The relationship between parental warmth and anxious modeling and child anxiety has been mixed and inconclusive. Parents, however, may also play a role in the development of certain *cognitive vulnerabilities* that may contribute to anxiety. For instance, children with anxiety disorders are more likely than non-anxious children to demonstrate a *threat bias*, or a tendency to interpret ambiguous situations as dangerous or threatening (Hadwin, Garner, & Perez-Olivas, 2006; Waters, Craske, Bergman, & Treanor, 2008). Parents may contribute to this bias by verbally communicating threat information about specific objects or events (Field & Lawson, 2003). Another cognitive vulnerability, *anxiety sensitivity* (*AS*), refers to children's beliefs that anxiety symptoms will have harmful social, mental, or physical consequences. Empirical evidence and conclusions from a recent meta-analysis (Noël & Francis, 2011) suggest that AS is an important risk factor and has been shown to predict anxiety over time.

Assessment and Treatment

A number of instruments have been developed and refined to aid in the assessment and diagnosis of childhood anxiety disorders (see Greco & Morris, 2004; Moretz & McKay, 2011 for reviews). Evidence-based and psychometrically sound instruments are available in several formats including semi-structured diagnostic interviews, parent-, teacher-, and child-report measures, and behavioral observations. A thorough assessment involves using multiple formats and obtaining information from multiple informants.

Empirically supported treatments for child anxiety disorders fall into two broad categories: pharmacotherapy and psychotherapy. Comprehensive reviews of medication therapies are available elsewhere (see Stein & Seedat, 2004 for a review). The efficacy of medications for treating these disorders has been evaluated in over 22 randomized-controlled trials. A recent meta-analysis of these trials, most of which evaluated the use of selective serotonin reuptake inhibitors (SSRIs), concluded that active medications were more effective than placebo in reducing anxiety symptoms with 58 % of children demonstrating a positive treatment response (compared to 31.5 % of those who received a placebo; Ipser, Stein, Hawkridge, & Hoppe, 2009).

Cognitive behavioral therapy (CBT) is a skills-based psychotherapy that involves several components including psychoeducation, cognitive restructuring, relaxation training, and gradual in vivo exposure to anxiety-provoking situations (see D'Eramo & Francis, 2004 for a review of treatment strategies). The primary goal of CBT is to help children gradually face, rather than avoid, their fears. Overall, CBT is effective in reducing anxiety in children (see Ollendick, King, & Chorpita, 2006; Silverman & Pina, 2008 for reviews). A meta-analysis of 24 randomized controlled trials of CBT reported that 69 % of children who completed CBT, compared to 13 % of those in a waitlist comparison condition, no longer met criteria for their pretreatment anxiety disorder (In-Albon & Schneider, 2006).

Few studies have directly compared the relative efficacy of medication and CBT. The Child

and Adolescent Anxiety Multimodal Study (CAMS) was the largest placebo-controlled randomized controlled trial to evaluate CBT, medication (sertraline), and their combination for treating children and adolescents (N = 488) with anxiety disorders. After 12 weeks of treatment, 80.7 % of youth who received combination therapy, 59.7 % of those who received CBT, 54.9 % of those treated with sertraline, and 23.7 % of those who received an inactive placebo were rated as much/very much improved by an independent evaluator who was unaware of treatment condition (Walkup et al., 2008). All active treatments were superior to placebo and there was an advantage of combination therapy over either monotherapy (which did not differ significantly).

Discussion

Childhood anxiety disorders are pervasive and negatively impact children's quality of life by impairing academic, social, and familial functioning. The etiology of childhood anxiety disorders is far from understood; however, numerous biological and environmental risk factors have been identified as contributing to the development and maintenance of these disorders. Additional studies are needed to shed light on the complex processes that give rise to these disorders. If left untreated, childhood anxiety disorders increase the risk of other long-term consequences including adult anxiety, depression, ▶ substance abuse, and suicidal ideation. Treatment is effective for the majority of youth; however, given that many remain symptomatic after treatment, there is a clear need for improvement and many questions remain regarding the long-term effectiveness of interventions, predictors of treatment outcome, and the mechanisms by which interventions impact anxiety symptoms and functioning. Notwithstanding, research conducted over the past two decades has contributed significantly to our understanding and treatment of childhood anxiety disorders, and future studies will continue to advance science and practice in order to help the millions of children who struggle with these disorders.

Cross-References

- ▶ Attachment
- ▶ Cognitive Behavior Therapy with Children
- ▶ Parenting Style

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Childhood Cancer

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Synonyms

Central nervous system (CNS) tumors; Leukemia

Definition

Survival rates for childhood cancer have dramatically improved since the 1970s when survival rates were less than 50 %. However, the challenge is now to ensure that children diagnosed with cancer do not just survive but also live good quality lives.

Description

Childhood cancer is very rare; only around 1 in 200 (0.5 %) of all cancers occur in children aged under 15 years (Strobel, Marks, Smith, El Habbal, & Spitz, 2007). Leukemia is the most common type of childhood cancer, representing about one-third of all cancers in under 15 year olds (Childhood Cancer Research Group, 2011). The majority (80 %) of childhood leukemia cases are acute lymphatic leukemia (ALL). Other types include acute myeloid leukemia (AML) and chronic myeloid leukemia (CML), although chronic forms of leukemia are more common in adults than children. The second most common childhood cancers are central nervous system (CNS) tumors, which account for about a quarter of all childhood cancers. As with leukemia, a number of different diagnoses are possible; however, the most common tumors seen in childhood are gliomas and medulloblastomas.

Since the 1960s, there have been great advances in the treatment of most childhood cancers, resulting in markedly higher survival rates, particularly in high-income countries. In these countries, by the mid-1990s, nearly 75 % of children with cancer survived at least 5 years after diagnosis (known as 5-year survival). For the main type of childhood leukemia, 5-year survival was above 80 % and exceeded 50 % for every main type of childhood cancer. Seven in ten children with cancer are now cured, compared with fewer than three in ten in 1962–1966. The overall cure rate for childhood cancer has drastically improved over the last two decades in association with clinical trials and the development of new multimodal treatments.

The improvement in survival rates has come at a cost, however. As more children are cured of cancer, longer-term adverse effects of treatment become more apparent, and it is increasingly recognized that the care of a child with cancer does not end with survival. A significant number of childhood cancer survivors experience late effects (complications, disabilities, or other adverse outcomes) as a consequence of the cancer, its treatment, or both, meaning that it is appropriate to view childhood cancer as a chronic illness. The specific nature of late effects will depend on the nature of diagnosis, site of the cancer, and type of treatment. A 25-year follow-up study of survivors in the USA found that a significant number reported multiple chronic health problems, in particular musculoskeletal, cardiac, and neurologic conditions (Mody et al., 2008). Cognitive impairment is also a significant risk for children whose cancer or its treatment involved the CNS; this includes children whose initial diagnosis was for leukemia (Bisen-Hersh, Hineline, & Walke, 2011) as well as those who had treatment for a CNS tumor (Ellenberg et al., 2009), this impaired functioning often results in academic difficulties and lower educational attainment.

A number of psychosocial limitations have also been described (Jenney, 2005). In particular, studies of survivors have shown consistent difficulties in forming relationships, including friendships in childhood and adolescence (Jenney, 2005), while lower rates of marriage are reported for adult survivors of childhood cancer (Last & Grootenhuis, 2005; Mody et al., 2008).

Thus, childhood cancer survivors often report poor general health, increased mental health problems, and greater functional impairment than the general population. However, the extent to which this compromises ▶ quality of life (QoL) is a subject of some debate, with inconsistent findings reported (Langeveld, Stam, Grootenhuis, & Last, 2002). Thus, while

some studies note that long-term effects, in particular ▶ fatigue, and general aches and ▶ pain impact negatively on QoL (Zebrack & Chesler, 2002), other studies describe childhood cancer survivors who report good QoL (Zelter et al., 2008).

Some evidence suggests poorer outcomes may be influenced by factors such as psychological adjustment (Meeske, Ruccione, Globe, & Stuber, 2001). Differences have also been found for cancer survivors depending on their original diagnosis, with compromised QoL being greater for children diagnosed with a CNS tumor, than for children who have survived other forms of cancer (Eiser, Vance, Horne, Glaser, & Galvin, 2003). This may be because cognitive sequelae have been found to be worse for CNS tumor survivors, which has in turn been linked to compromised quality of life in pediatric CNS tumor survivors (Merchant et al., 2002). Other relevant influences may relate to treatment type. Highly compromised QoL has for example been noted for children who have had a bone marrow transplant as treatment for leukemia, and this is usually linked to the high risks related to treatment in terms of mortality and morbidity. Indeed, BMT is usually seen as a "last hope" treatment (Forinder, 2004), and long-term survival rates for children treated with BMT following a leukemic crisis are estimated at between 40 % and 50 % (Bennett-Rees & Hopkins, 2008). Furthermore, survival is not problem-free, and complications of transplant are common, both immediately after transplant and later in recovery in the form of late effects (Bennett-Rees & Hopkins, 2008).

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Childhood Diseases and Disabilities

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Synonyms

Health-related quality of life (HRQOL); Intellectual disability (ID); Pediatric chronic conditions

Definition

Global quality of life (QOL) means the quality of a person's state of existence. Some people believe QOL to be multidimensional (Sloan et al., 1998), while other researchers have found QOL to be about one single dimension like love (Fromm, 2000), ability to relate (Buber, 1970), or our fundamental *sense of coherence* (Antonovsky, 1985, 1987). The more spiritual and abstract the thinking about life is, the more QOL is about a single all-penetrating life-force, like God, the Great Spirit, or the great void (Sunya). The more materialistic the worldview, the more factors are believed to be of relevance. Modern biomedicine often presents the idea that illness and health are multidimensional phenomenon with multifactorial causes.

QOL has been described as well-being, life-satisfaction, happiness, meaning of life, inner balance, self-actualization, realization of life's potentials, fulfillment of needs and abilities, and functioning in general (Ventegodt, 1996). All these dimensions have been integrated into the theory of integrative quality of life (Ventegodt, Merrick, & Andersen, 2003a), which has been the basis of several QOL questionnaires like the SEQOL (Ventegodt, Merrick, & Andersen, 2003b) and the QOL5 (Lindholt, Ventegodt, & Henneberg, 2002) with only five items.

Childhood is the age span ranging from birth to adolescence and early adulthood.

A disease is an abnormal condition affecting the body of an organism often associated with specific symptoms and signs. It can be caused by external factors, such as infectious disease, or it may be caused by internal dysfunctions, such as autoimmune diseases. In humans, "disease" is often used more broadly to refer to any condition that causes pain, dysfunction, distress, social problems, and/or death to the person afflicted.

Childhood disabilities have been defined and measured differently depending on the purpose, the need, the researcher, the time, and the attitude of the society where the study has taken place. Different terms have been used, such as chronic illness, chronic conditions, handicap, developmental disability, impairment, or disabling chronic condition. Another problem is that a chronic condition in a child does not always result in disability and that disability may change over time.

Disability is a dynamic concept that varies in each individual depending on the context and the resources available. The World Health Organization (WHO) (1) has tried to classify the consequences of illness at three levels (International Classification of Impairments, Disabilities, and Handicaps or ICIDH): ***impairment*** – defined as any loss or abnormality of psychological, physiological, or anatomical structure or function; ***disability*** – defined as any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being; and ***handicap*** – a disadvantage for a given individual resulting from an impairment or a disability that limits or prevents the fulfillment of a role that is normal (depending on age, sex, social, and cultural factors) for that individual. A uniform definition or classification has yet to be used by service providers (medical, educational, social welfare, or rehabilitation services), researchers, or policymakers.

Description

Quality of Life Measurement in Children

In the 1990s in the Netherlands, a quality of life questionnaire was developed for children (the 56-item TACQOL questionnaire) (Verrips et al., 1999). They used a random sample of 1,789 parents of 6–11 year olds (response rate 71 %) and 1,159 children aged 8–11 years (response rate 69 %). Results showed that children with chronic diseases and children receiving medical treatment had lower TACQOL scores than healthy children.

Quality of life measures need to be more routinely included in evaluations of alternative treatments so that we are able to understand the burden of treatment experienced by families. The PedsQL (http://www.pedsql.org/about_pedsql.html) is a brief, standardized, generic assessment instrument that assesses patient and parental perceptions of health-related quality of life (HRQOL) in pediatric patients with chronic health conditions. The PedsQL is based on a modular approach to measuring HRQOL and consists of 15-item core measures of global HRQOL and eight supplemental modules assessing specific symptom or treatment domains. The PedsQL was empirically derived from data collected from 291 pediatric cancer patients and their parents at various stages of treatment. PedsQL is a reliable and valid measure of HRQOL. The PedsQL core and modular design makes it flexible enough to be used in a variety of research and clinical applications for pediatric chronic health conditions.

Epidemiology of Childhood and Adolescent Disability

In Israel, the total disability rate during childhood is 7.1–7.7 % (Merrick, Drachman, Merrick, & Morad, 2003). Looking at information from Scandinavia (Denmark, Finland, Iceland, Norway, and Sweden), one study was performed with 10,475 randomly sampled children in 1984–1985 (Köhler & Jakobsson, 1987, Köhler, 1990) and another of 10,664 children in 1996 (Berntsson & Köhler, 2001). The studies were conducted as a questionnaire study to parents and children with over 3,000 contacts in each country and a response rate of 56–83 %. In the 1984–1985 study, chronic illness or handicap was defined as a condition, which for at least 3 months had seriously affected the daily life of the child, during the last year. A total of 7.7 % of the 10,475 children had a disability, with 7.4 % for girls, 8.2 % for boys, and increase with older age.

In the United States, the Survey of Income and Program Participation (SIPP) has been conducted since 1983 on the basis of a nationally representative sample of households from the civilian noninstitutionalized population (Aron, Loprest, & Steuerle, 1996). Parents with a child under age six were asked if the child "had any limitations at all in the usual kind of activities done by most children their age" and if their child had received therapy or diagnostic services designed to meet developmental needs. Parents of children aged 3–14 years were also asked if their child had a "long lasting condition that limited their ability to walk, run, or use stairs," and children aged 15 and older were asked a standard set of questions on limitations of activity developed for adult respondents. The 1991 SIPP data found that a total of 5.8 % of children under 18 years had a disability, 2.2 % under 3 years, 5.2 % from 3 to 5 years, 6.3 % from 6 to 14 years, and 9.3 from 15 to 17 years.

Another source on disability in the United States is the book compiled by the National Institute on Disability and Rehabilitation Research (Kraus, Stoddard, & Gilmartin, 1996). Data from 1996 showed that 6.7 % of all children (7.9 % of boys and 5.6 % of girls) had activity limitations due to disability, which again is close to the findings from Israel.

The variations observed in prevalence of disability in childhood can be due to many factors like genetic, environmental, or social factors or differences in definition, but it was interesting to see that our findings in Israel compared to the prevalence in Scandinavia and the United States. The studies reviewed also showed a trend with an increased prevalence of disabilities with increase in age, which can be due to the effect of easier diagnosis as the child gets older.

Due to better and more sophisticated medical care, the life expectancy of children with chronic

illness or disability has been prolonged, which could be one of the factors explaining the increase in the total number of children with disability over the years.

Transition

Due to the increase in survival of children with once life-threatening conditions, the practicing physician will encounter more children and adolescents with complex chronic illnesses that will require continuous service and transition from pediatric/adolescent health care to adult health care services. Experience has shown that the transition process was evident in health services, where the following elements were in place: (a) professional and environmental or institutional support, (b) decision-making and consent, (c) family support, and (d) professional sensitivity to the psychosocial issues of disability.

Quality of Life

Quality of life in children is composed of social, emotional, and physical functions of the child, the adolescent, and the family. To define quality of life in children is not easy due to the process of their growth, development, and perception with change over time in the developmental process from childhood to adulthood. There are also differences between adult and child QOL, and one of the major differences in defining quality of life in children is the activities and the relationships of the child.

Children with chronic disease may have some difficulties in cases such as family and friends relationships, choice of school and occupation, or participation in daily activities, especially in adolescence, where independence, ego, and body image are developed. For small children, the whole issue of proxy respondent should be raised, and the informant can change according to the age of the child. For instance, parents are generally chosen for small children as a proxy and a sibling or a friend for adolescents with chronic illness (Ventegodt et al., 2010).

Due to space constrains, we are not able to fully review all studies concerned with childhood disease and quality of life but will highlight some special findings below. If you are looking for a specific disease or disability and the QOL, you need to search at places like Medline (PubMed) or Google.

Physical Disabilities

Cerebral palsy is a very common childhood disability, and a small study of 12 children aged 12–16 years from Montreal (Shikako-Thomas et al., 2009) found a relationship between personal interests and preferences (intrinsic) and opportunities to participate in age-appropriate activities and leisure activities (extrinsic). A larger study from Hong Kong (Chow, Lo & Cummins, 2005) with 72 adolescents (13.5 ± 2.0 years) with physical disabilities (PD) was contrasted with 510 age-matched adolescents who did not have disabilities. It was found that the PD group had lower objective QOL score, but the two groups were not significantly different in subjective QOL score. No correlation was found between objective and subjective QOL in the PD group, while weak to medium correlations were observed for the controls. The apparent detachment of subjective feeling and objective circumstances in the PD group may reflect adjustment to their disabilities.

Intellectual and Developmental Disabilities

A project in Canada (http://www.utoronto.ca/qol/pwdd.htm) over a 10-year period with about 200 participants assessed QOL for people who continued to live in residential care centers, people who moved from large residential care to community living, and people who continued to live in communities.

People who continued to live in residential care centers found overall quality of life scores quite low, and scores did not change significantly over time. People who moved from facilities to communities improved quality of life, and scores continued to be fairly low even for people who moved to communities, especially for nonverbal people. People who lived in communities had scores higher for verbal people than for nonverbal people. Quality of life scores do not differ significantly for people living independently, with families, or in small congregate care, and some scores increased for verbal people over

time, and some quality of life scores for nonverbal people in small congregate care had been falling in recent years.

Other researchers have explored the family QOL (Neikrug, Judes, Roth, & Kraus, 2004) in families with children with intellectual disability.

Concerning people with severe and profound intellectual disability (ID), there has been a shortage of valid instruments to measure QOL, but recently, a questionnaire (QOL-PMD) has been developed and tested (Petry, Maes, & Vlaskamp, 2009a, 2009b) with 49 persons with profound ID. For each of these people, three informants were chosen who each filled out the QOL-PMD. Characteristics regarding the medical condition of the person turned out to be most strongly associated with the QOL-PMD scores. Other personal characteristics such as age, gender, motor limitations, and sensory limitations did not have a significant effect on the QOL-PMD scores. With regard to the setting characteristics, location of the setting and staffing level turned out to have a significant effect on the QOL-PMD scores (Petry et al., 2009b).

Long-Term Issues

Concerning long term, a recent review (Roebroeck, Jahnsen, Carona, Kent, & Chamberlain, 2009) looked at functioning, quality of life, and lifespan care issues of adolescents and young adults with childhood-onset physical disability from performed studies in rehabilitation-based samples of (young) adults with childhood-onset conditions such as cerebral palsy (CP) and spina bifida (SB). The studies reviewed showed that many young adults with a childhood-onset disability experienced health-related problems such as functional deterioration, pain, or fatigue and an inactive lifestyle. A significant number were restricted in participation in work, housing, and intimate relationships. They perceived a lower health-related and global QOL compared with reference group.

Another group is the children with operated congenital heart disease surviving into adulthood. A study from Schweiz (Loup et al., 2009) of 345 patients (mean 26+/−11 years) operated for isolated transposition of the great arteries (TGA), tetralogy of Fallot (TOF), and ventricular septal defect (VSD) compared their later QOL with age- and gender-matched standard population data showed that they had excellent and comparable QOL to standard population, this without significant difference between the diagnosis groups. On the other hand, these patients are exposed to a high rate of complications and special psychosocial problems, which were not assessed by standardized questionnaires used.

Conclusions

Quality of life in childhood in general and in particular of children and adolescents with chronic disease and illness is a complex issue. First, there is the issue of defining quality of life in children, which is not easy due to the process of their growth, development, and perception which change over time in the multifaceted developmental process from childhood to adulthood. Second, there is the issue of how to measure and construct standard questionnaires, and thirdly, when we deal with chronic disease, there are specific issues to each specific chronic illness.

It is therefore recommended that researchers or clinicians search the literature for specific questionnaires in use for a specific chronic illness in order to being able to compare with other findings and this way learn and improve both the research and also the clinical work with this population.

Finally, there is today the issue of transition from childhood to adulthood in the medical setting, where children with disease that just years ago would not survive into adulthood and today have a much better outcome and life expectancy. A continuum must be established in order to provide better service to this population.

Cross-References

- ▶ Developmental Disability
- ▶ Disability
- ▶ Handicap
- ▶ Happiness
- ▶ Intellectual Disability
- ▶ Mental Retardation
- ▶ Quality of Life
- ▶ Well-Being

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Childhood, Fast Food, Obesity, and Happiness

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Description

Increasing Attention on Children Obesity

The World Health Organization has reported that obesity has become a growing threat to human

health both in developing and developed countries. The prevalence of childhood obesity is also of increasing public concern around the world. Childhood obesity is a major public ▶ health problem that has both individual and environmental causes. Among all of the factors that may be related to children's body weight, the promotion of healthy eating has become a target of health promotion and research programs (Ludwig, Peterson, & Gortmaker, 2001). Consequently, a number of nutrition and public health studies suggest the importance of examining the influence of "unhealthy foods" such as fast foods on children's weight (e.g., Bowman, Gortmaker, Ebbeling, Pereira, & Ludwig, 2004; Hsieh & FitzGerald, 2005). In addition to fast-food consumption, the association between children's soft drink consumption and obesity has also been discussed in the literature (e.g., Andersen et al., 2005; Ariza, Chen, Binns, & Christoffel, 2004; Berkey, Rockett, Field, Gillman, & Colditz, 2004; Forshee et al., 2004; Troiano, Briefel, Carroll, & Bialostosky, 2000).

Importance of Subjective Well-Being

Research focusing on individuals' ▶ subjective well-being has received great attention recently due to the fact that the rational vision of economic decision-making has come under increasing scrutiny (Graham, 2005). Since the maximum utility framework cannot explain many circumstances of individuals' decisions, an alternative indicator of human well-being from the field of psychological science has been proposed to explain human behavior. One of the common indicators of subjective well-being is "▶ happiness" or "unhappiness." Recently, the use of happiness indicator has received increasing attention from economists (e.g., Frey & Stutzer, 2002; Kahneman & Krueger, 2006). Most of the studies related to subjective well-being are focused on the examination of the factors associated with adult's subjective well-being. However, less attention has been paid to children.

What Have We Added to the Literature?

This entry aims to answer two important questions. First, what factors are associated with children's fast-food and soft drink consumption? Second, how do these two types of consumption influence children's obesity and unhappiness? Given an increasing interest on child obesity and food consumption, little is known about the effect of food consumption on subjective well-being of children. While we agree with the mainstream approach of childhood health policy looking at objective well-being, we argue that a good prevention policy should also focus on the effect on subjective well-being since it could complement findings related to objective well-being. Using nationwide survey data in Taiwan, our empirical results suggest that children's fast-food and soft drink consumption are influenced by children's characteristics and household features. Additionally, both soft drink consumption and fast-food consumption are positively associated with children's overweight and negatively associated with degree of happiness. If the likelihood of children's overweight and happiness could represent their objective and subjective well-being, respectively, our findings suggest that consumption of fast food and soft drinks can result in a trade-off between children's objective and subjective well-being.

Data and Statistical Analysis

We used data drawn from the National Health Interview Survey in Taiwan (NHIST) in 2001, collected by the National Health Research Institute of Taiwan (NHRI). In total, 2,366 children were selected for empirical analysis. Respondents were asked the following question: "How often does your child consume the following food item?" There are five categories that each respondent's answer may fall into never, seldom, sometimes, often, and always. We assign a value between 0 and 4 (i.e., 0 for never, 1 for seldom, 2 for sometimes, 3 for often, and 4 for always) to the answers for each food item and sum up the scores for food items: French fries, pizza, and hamburger. This sum represents our measurement for fast-food consumption. Also, the corresponding scores for soda and other sugar-sweetened beverages are our measurement for soft drinks.

The weight status of each child is defined by the body mass index (BMI). Unlike the case of adults, children's BMI cannot be directly used to define their weight status since it has to be defined by age and gender based on the distribution of the population in the same age. In our sample, approximately 25 % of children are considered overweight or obese. With respect to children's degree of unhappiness, respondents of NHIST are asked the following question: "How often does your child feel unhappy, sad or depressed?" Each respondent's answer may fall into one of three categories: never, sometimes, and often. We combined the last two categories into a single category to represent if the child ever feels unhappy, sad, or depressed. In so doing, a binary indicator "unhappy" is used to indicate if the child feels unhappy. The sample statistics show that about 19 % of children sometimes or often feel unhappy, sad, or depressed.

We estimate a four-equation simultaneous-equation system. The first two equations represent the fast-food and soft drink consumption of children, and the other two equations represent children's likelihood of being overweight and unhappy. This model is mixed in that children's consumption of fast food and soft drink are censored and the variables representing children's risk of being overweight and unhappy are binary indicators. Suppose i represents each child, the simultaneous-equation system is specified as:

$$y_{1i}* = x_i\beta_{1i} + z_i\lambda_1 + \varepsilon_{1i}$$

$$y_{2i}* = x_i\beta_{2i} + z_i\lambda_2 + \varepsilon_{2i}$$

$$y_{3i}* = x_i\beta_{3i} + y_{1i}\alpha_1 + y_{2i}\alpha_2 + \varepsilon_{3i}$$

$$y_{4i}* = x_i\beta_{4i} + y_{1i}\gamma_1 + y_{2i}\gamma_2 + \varepsilon_{4i}$$

$$y_j = y_j * iff\, yj* > 0 \text{ and } y_j = 0iff\, y_j* \le 0 \quad (j = 1 \text{ and } 2)$$

$$y_k = 1iff\, yk* > 0 \text{ and } y_k = 0iff\, y_k* \le 0 \quad (k = 3 \text{ and } 4)$$

where y_1* and y_2* are the unobserved latent variables that represent children's fast-food and soft drink consumption, respectively. y_3* and y_4* are the unobserved latent variables that represent the likelihoods of being overweight and unhappy. Since not every child consumes fast food or soft drink, these two variables may be censored at zero. y_3 and y_4 are the binary indicators for the latent variables y_3* and y_4*, respectively. x_i is a vector of common exogenous factors that are associated with child's food consumption and the risk of being overweight and unhappy. The vector z_i contains the excluded variables that are associated with child's food consumption but not directly affecting his/her likelihood of being overweight and unhappy. The vectors (α, β, λ, γ) are the parameters of interests.

Key Findings and Policy Implications

The most interesting finding and contribution of this research is the association between children's fast-food and soft drink consumption and their objective and subjective well-being. Results show that children who consume more fast food and soft drink are more likely to be overweight but are less likely to be unhappy. The estimated average treatment effects of children's fast food and soft drink on likelihood of being overweight are 0.02 and 0.151, respectively. That is, after controlling for the socioeconomic factors and other exogenous determinants, children who consume fast food and soft drinks are more likely to be overweight by 2 % and 15 %, respectively, than children who do not consume fast food and soft drinks. However, children who consume fast food are 5 % less likely to be unhappy and children who consume soft drinks are 4.6 % less likely to be unhappy than their counterparts.

Several points are noticeable from this finding. First, this result tends to confirm the findings of previous studies regarding the positive association between children's fast-food consumption and body weight. Second, this finding contributes to the debate of the influences of children's soft drink consumption on body weight. Consistent with the findings by Troiano et al. (2000), a positive association between soft drink consumption and the risk of being overweight or

obese is evident. Third, our results demonstrate that children's consumption of fast food and soft drink is positively correlated with their level of happiness.

What possible policy implication can be inferred from our findings? Obviously, our results suggest a trade-off in the influence of food consumption on childhood obesity and unhappiness. While consumption of fast food and soft drinks is positively associated with childhood obesity, they also tend to be positively correlated with their level of happiness. While the definitive assessment of the mechanisms underlying these associations is complicated, these findings may imply that there could be a trade-off between children's obesity and happiness with reductions in fast-food and soft drink consumption. It is then possible that policy interventions would be insufficiently effective in reducing childhood obesity if they do not take into account the effect of policy prescriptions that could reduce fast-food and soft drink consumption on children's happiness. Policy or program prescriptions should take this trade-off into account to facilitate reduction in childhood obesity without sacrificing children's degree of happiness. Hence, current and future policy/program interventions that aim to decrease fast-food and soft drink consumption of children to reduce childhood obesity may be more effective if these interventions also focus on ways that could compensate the potential reduction in degree of happiness of children.

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Childlessness

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Synonyms

Childfree (term used in movement of voluntary childless people)

Definition

Childlessness can have different reasons and therefore be defined in different ways. Unfortunately, however, scholars have often bunched several childless groups together. In the literature about the transition to parenthood, researchers place young individuals who may still make the

transition to parenthood in the childless category. So, in these research designs, no distinction is made between permanently childless individuals and people who are "not yet parents." Others have reduced parenthood to having children living in the parental home, which obscures the distinction between the childless and empty-nest parents (for reviews of this problem, see Kendig, Dykstra, Gaalen, & Melkas, 2007; McLanahan & Adams, 1987). As a result, no distinction is made between lifelong childlessness and no longer having children living at home. Finally, differences between never having had children and outliving one's children also tend to be glossed over. Most studies simply compare individuals with and those without living children. In this article, I define childless as *remaining childless*, that is, individuals who have never had children and who are beyond the fertile age.

Description

Historical Trends in Childlessness

With approximately 20 %, in other words one fifth, of the current population, who will never have children, the current interest in childlessness is not a surprise. However, from a historical perspective, these childlessness rates are not unprecedented (Rowland, 2007). Historical trends of childlessness are remarkably similar across countries. There was a peak in childlessness rates for the 1880–1910 birth cohorts, with childlessness rates of approximately 23 %. From the 1910 birth cohort onward, a more or less continuous drop was witnessed, with childlessness rates of about 11 % in 1945. Cohorts born after the Second World War again witnessed a steady rise, leading to a childlessness rate of approximately 20 % in the most recent examined birth cohort. Thus, in contrast to common beliefs, childlessness rates have not always increased. Rather, childlessness rates through time can best be characterized by a U-shaped pattern.

Why do contemporary rates of childlessness receive heightened interest, while even they will not equal the level of childlessness in cohorts born in the early decades of the twentieth century? From a scientific perspective, one reason might be that recent trends in childlessness occur in joint with other demographic changes, increasing longevity, lower marriage rates, and higher divorce rates, making (particular groups of) childless individuals at greater risk of loneliness, isolation, and distress (Dykstra & Hagestad, 2007; Zhang & Hayward, 2001). From a societal perspective, the interest likely stems from the fact that people can nowadays opt not to have children. With the introduction of birth control, people are able to remain childless without having to refrain from being in a romantic relationship. Many scientific studies have been written, and public interest has increased in the notion of "voluntary childlessness" since the 1970s (e.g., Niphuis-Nell, 1977; van den Bandt, 1982).

Views on Childlessness

Being a parent is commonly seen as at the core of having a normal adult life (Dykstra & Hagestad, 2007). Research on childlessness has been colored by this notion. From the moment childlessness became a topic of scientific research, the childless have been depicted in negative terms: less well adjusted, less nurturing, more materialistic, more selfish, more individualistic, and more career-oriented than parents (see for an overview Ganong, Coleman, & Mapes, 1990). It was often thought that something was wrong with childless individuals, as the common belief in these days was that there existed an innate need for children (Veenhoven, 1975). Even though the above-mentioned stereotypes were more powerful a few decades ago, and even though the literature does not provide evidence for an innate need for children (Veenhoven, 1975), the childless are still depicted in the literature as others, as deviants (Letherby, 2002).

In contrast to this general societal view, there is a small group of individuals which opposes the above-sketched view. This small group of individuals labels itself "childfree," and individuals from this group have often already expressed at an early age that they do not intend to have children (e.g., Houseknecht, 1987). These individuals resist the notion that having children and being a parent are at the core of having a normal adult life.

Voluntary Versus Involuntary Childlessness

In the past, scholars started from the notion either that individuals decided at an early stage that they wanted to remain childless or that they ended up childless because of infertility or subfecundity. To unravel how people ended up childless, scholars made a distinction between voluntary and involuntary childlessness (e.g., Houseknecht, 1987). Such a dichotomized subjective distinction may still be useful for understanding how childlessness impacts people's feelings and behaviors in later life. However, in contemporary developed countries, this distinction has become less informative for understanding how people came to childlessness, as will be elaborated in the following. In this context, cases of infertility should be distinguished from fertile people. A small proportion of individuals is infertile, about 2–4 % of the population. These individuals are likely to differ from individuals who ultimately decided not to have children, as for them, never having biological children is a fait accompli, which likely has a strong detrimental impact on feelings of well-being (e.g., McQuillan, Torres Stone, & Greil, 2007).

Researchers have pointed to the difficulties of framing childlessness in terms of choice (DeOllos & Kapinus, 2002; Hobcraft & Kiernan, 1995; Letherby, 2002; Morgan, 1991; Toulemon, 1996). First, the criteria are quite ambiguous. Second, the criteria are somewhat inadequate. In reality, many people remain childless without having explicitly pondered the decision whether or not to become a parent (Toulemon, 1996). Furthermore, issues of choice are irrelevant to those who are biologically unable to conceive. Only a small group of individuals expresses at an early age that they do not intend to have children, the so-called early deciders (e.g., Houseknecht, 1987). A larger group ends up childless without having explicitly pondered the decision whether or not to become a parent (Toulemon, 1996). For that reason, it is more appropriate to speak of "remaining childless" than choosing childlessness (DeOllos & Kapinus, 2002; Letherby, 2002). In recent years, many scholars have therefore shifted their attention to investigate the pathways that lead to remaining childless (Keizer, Dykstra, & Jansen, 2008; Hagestad & Call, 2007). As such, scholars have moved away from simple comparisons of parents versus childless individuals and from comparisons between voluntary and involuntary childless individuals.

Pathways into Childlessness

Scholars have argued that information on the diversity among the pathways of the childless will help show what the life outcomes of contemporary childless individuals are. The rationale is that remaining childless affects people's lives differently, depending on how they came to childlessness (Dykstra, 2004; Dykstra & Wagner, 2007). For example, differences in people's partnership histories are likely to lead to variations in the ramifications of remaining childless. Cross-national studies reveal that the life outcomes of never-married childless women are much more favorable than those of their married counterparts. For men, the opposite patterns are most commonly found (Koropeckyj-Cox & Call, 2007). Whereas never-married men are more likely to have been excluded from marriage because of health problems and poor economic prospects, never-married women are more often found to be self-reliant women with alternative opportunities outside marriage. These examples stress the importance of examining the impact of childlessness while taking into account people's life courses.

Theoretical Framework: Life Course Perspective

The above-mentioned notions are all incorporated in the life course perspective, a theoretical framework that is nowadays most frequently used to analyze childlessness. In the life course perspective, individual behavior is viewed as being embedded in dynamic, interdependent contexts (Elder, 1985). Although the life course perspective is often applied to grasp the interplay between micro- and macrolevels, it is also often used to understand what the consequences of a childless life are.

Firstly, the life course perspective argues that decisions concerning major life course events are shaped by an individual's past experiences, a process labeled "cumulative contingencies"

(Dannefer, 2003; O'Rand, 1996). This notion emphasizes the use of life histories to make sense of the causes of childlessness. How long individuals were in education, whether and when people entered work, became partnered, or ended a partnership, may be very useful for understanding why people remained childless. The timing and stability of partnerships are particularly crucial for women. Late marriages or disrupted marital careers before the birth of the first child may result in women missing what is called "opportunity deadlines" (Hagestad & Call, 2007).

Secondly, the life course perspective emphasizes that decision making on important life course transitions is strongly influenced by the interplay between various parallel careers, a notion known as "path interdependencies" (Elder, 1994). This notion emphasizes that in order to understand the impact of remaining childless, circumstances and behavior in various domains, such as marriage and occupation, should be taken into account. For example, whether or not people have or had a partner may make a substantial difference in terms of how people experience the impact of childlessness.

Neglect of Men

Previous work on childlessness has focused primarily on women and has neglected men (Forste, 2002). There are two reasons why there is little information on childless men. First, few data are available on men's fertility behavior and childlessness (Dykstra, 2009). Childbearing decisions were thought to be taken primarily by women, men merely being of economic importance in these decisions (Greene & Biddlecom, 2000). Scholars also questioned the reliability of information about men's fertility behavior, as men's reproductive spans are not as clearly defined as those of women and as women can provide information about their fertility with much greater accuracy than men. Second, scholars have tended to focus only on women because the ramifications of not having entered the parental role are generally assumed to be greater for childless women than for childless men. The idea underlying this assumption is that being a parent is considered to be more central to the lives of women than to those of men.

Recently, scholars have questioned this latter assumption, and in the last decade, more studies have conducted on the consequences of childlessness for men or for both women and men (Dykstra & Wagner, 2007; Keizer, 2010). These latter studies made it possible to contrast the life outcomes of childlessness between women and men and revealed that large differences exist between childless women and men but also that men are not less affected by remaining childless than women, merely in different ways. Below, I will give a brief overview of the empirical findings on the consequences of childlessness for both women and men.

The Consequences of Childlessness for Well-Being

In general, the literature on the impact of childlessness on individual's well-being shows that the consequences of childlessness are not necessarily uniform across different life domains. Below, I'll describe the main findings for social well-being, physical and psychological well-being, economic well-being, and mortality.

Social Well-Being

Studies reveal that there are no substantial differences in participation in local communities between those with and without children, but strong differences with respect to contact with relatives are found. Childless individuals have much less contact with relatives than parents (Dykstra & Keizer, 2009; Keizer, Dykstra & Poortman, 2010a) but mainly formerly married childless men. In contrast, childless individuals in general have stronger ties with friends than their counterparts with children. The childless also have more shallow support networks than parents, especially childless men and particularly formerly married childless men. Never-married childless women, especially compared with their male counterparts, fare particularly well, in terms of social activity (Wenger, Dykstra, Melkas & Knipscheer, 2007).

Physical and Psychological Well-Being

In general, scholars have showed that the childless are more likely to engage in health-compromising

behaviors such as smoking and drinking and to engage less in physical exercise. Particularly never-married and formerly married childless men were disadvantaged; for women, no particular group stood out (Kendig et al., 2007; Keizer et al., 2010a). The health of formerly married men was particularly poor if they were childless, a pattern observed among others for general health, depression, and engaging in physical exercise (Kendig et al., 2007; Zhang & Hayward, 2001). Similar to the findings for social well-being, and as will be seen later on for economic well-being, never-married childless women fare much better than never-married childless men (Dykstra & Hagestad, 2007). With respect to psychological well-being, studies reveal that childless men have lower levels of life satisfaction but higher levels of daily mood compared with fathers (Keizer et al., 2010a). With respect to relationship satisfaction, and more specific marital satisfaction, studies show that childless couples are slightly more satisfied compared with parents, especially compared with parents with young children (Keizer, Dykstra, & Poortman, 2010b). Again, however, findings vary markedly by partner status; the psychological well-being of married childless men and, to a somewhat lesser extent, married women do not significantly differ from married parents or are even reported to be higher (Veenhoven, 2011).

Economic Well-Being

Studies reveal that when it comes to economic well-being, marital history is a better predictor than parental history, for both women and men. However, controlled for marital history, studies do reveal that fathers have higher levels of income than childless men (Keizer et al., 2010a). Never-married men have the lowest level of educational attainment, occupational prestige, and income. Never-married childless women, especially compared with their male counterparts, fare particularly well, in terms of educational attainment (Koropeckyj-Cox & Call, 2007).

Mortality

The majority of studies investigating associations between childlessness and mortality have focused on women. Most find that childless women, and women with more than four children, have higher mortality risks (see the review of Hurt, Ronsmans, & Thomas, 2006). The scarce literature on men is mixed. Some studies suggests that mortality risks are alleviated for childless men (e.g., Keizer, Dykstra, & van Lenthe, 2011), but more research is needed to be able to draw firm conclusions.

Developments in the Study of Childlessness

In the last three decades, our understanding of the consequences of childlessness has improved tremendously. Scholars have moved beyond simple comparisons between the childless and the parents, to making distinctions among the childless, and most recently to incorporating information on the pathways that lead to a childless life to graph the consequences of such a life. The literature has revealed that the consequences of childlessness are not monolithic: the consequences of remaining childless vary greatly by marital status and gender. Childless men, in particular the never and formerly married, seem to fare the least well. Although large progress has been made in understanding the consequences of childlessness, there are still many avenues that can be taken to broaden and deepen our understanding of the consequences of childlessness. Below, I highlight some of them.

Couple Analyses

With some exceptions, the literature on childlessness can be characterized by a focus on individuals rather than on couples. An individualistic perspective on childlessness overlooks that women and men within couples share a common set of characteristics with each other that make them more similar to each other than to persons from other couples (Kenny, Kashy, & Cook, 2006). Most of the above-mentioned studies showed that the impact of childlessness is felt differently by women and men. However, these individuals were not part of a couple. It might be the case that women and men within the same couple experience fewer differences. Although there are many studies that take a couple perspective when investigating why and when people

have children, few have focused on those couples that remain childless. Future research should benefit from a couple perspective on the pathways into and the life outcomes of childlessness.

Cross-National Comparisons

The majority of studies conducted on childlessness are based on data from single countries. As a result, individual differences in pathways and life outcomes of childlessness can be identified, but scholars are unable to scrutinize whether these pathways and outcomes are also influenced by policies, laws, and economic circumstances on a macrolevel. These factors may influence the extent to which people are able to integrate having children into their personal lives and the extent to which childlessness makes itself felt in other life domains. Cross-national comparative research that assesses whether and which policy measures influence the pathways and consequences of childlessness would be of great scientific and societal relevance.

Focus on Differences Between Childless Men and Fathers

Future research should continue to investigate the consequences of remaining childless for men. Not only because men have often been neglected in studies on childlessness but also and mainly so because it is expected that clearer contrasts between childless men and fathers will be apparent in future years, given indications that men are being more strongly selected into fatherhood (Dykstra & Hagestad, 2007). In contrast, differences between childless women and mothers will likely diminish in the future, given the improved conditions for combining work and family life.

Longitudinal Design

As the cultural meanings of childlessness have changed over recent decades, it is likely that the impact of childlessness will vary across cohorts and over historical time. With the recent availability of large-scale longitudinal panel studies (e.g., Understanding Society, GSOEP, NSFH, and NKPS), scholars are able to overcome some of the limitations of previous cross-sectional work. An interesting avenue for future research would be to investigate, with the use of these data, to what extent the effects of childlessness vary over time as well as across social groups and cohorts.

Cross-References

- ▶ Human Infertility
- ▶ Life Course Transitions

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Childlessness, Midlife, and Old Age

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Definition

This entry reviews the literature on the relationship between parental status and ▶ psychological well-being in middle and old age. Psychological well-being is defined broadly, in order to capture the complexity of the costs and benefits of having children or not for well-being. This review focuses on indicators of positive and negative, cognitive, and affective well-being: ▶ life satisfaction, ▶ happiness, positive and negative effect, depression, and loneliness.

Most studies define "parents" as the status of having living biological and/or adopted children and "childless" as the status of never having had such children. Yet, there is some variation and

ambiguity in how studies have categorized stepchildren, adopted children, and parents who have outlived all of their children.

Description

A vast literature has examined relationships between parental status and various indicators of ▶ subjective well-being in younger adults. This literature shows that people generally are happier without having (resident) children (for a recent review, see Hansen, 2012). Fewer studies have explored such relationships in midlife and old age.

There are reasons to expect that detrimental effects of childlessness may surface later in life. First, involuntary childlessness may lead to a sense of loss or failure, which may depress positive self-evaluations. Such consequences may be more evident in "older" populations, when childlessness is more likely to be permanent. They may also be more pronounced for women, as traditional ideas suggest that parenthood is more salient and rewarding to women than to men. Because childlessness prior to the 1960s was predominantly involuntary (due to nonmarriage, late marriage, or infertility), childlessness represents a disruption of the expected and projected life course for the bulk of childless persons in midlife and old age (e.g., Hagestad & Call, 2007). Second, a violation of *social* expectations can have similar psychological implications as not having met *personal* expectations. Although the stigma of childlessness has softened, it still persists, especially in older cohorts (Connidis, 2001). There are, however, marked cross-national variations in ▶ attitudes toward childlessness. In Europe, the percentage that strongly disapproves of voluntary childlessness ranges from 6 % to 8 % in the UK and the Nordic countries to 70–83 % in some of the former socialist countries (Huijts, Kraaykamp, & Subramanian, 2013). Third, childless persons will not enjoy the purported rewards of grandparenthood, such as an enhanced sense of engagement, ▶ purpose in life, and well-being. Fourth, adult development theory stresses the centrality of parenthood for adult psychosocial development (Erikson, 1963). Generativity is a key developmental task of midlife, which involves supporting and guiding the next generation, and is supposedly linked to mental health. The opposing tendency is obsessive self-indulgence, which is thought to be damaging for healthy development. Past research has found lower generativity for childless persons compared to parents, particularly among men (McAdams & De St. Aubin, 1992). Finally, research consistently links childlessness with lower access to companionship and support in old age, especially when it coincides with widowhood or poor health (e.g., Connidis, 2001).

Results

The following review reports results from analyses that minimally control for partnership status, to isolate the effect of parental status from that of partnership status. It also only includes studies of persons aged 40 and over. Because of limitations on references, some sources are left out. The reader is referred to a recent review (Hansen, 2012) for a complete list of references.

Life Satisfaction and Happiness

Studies typically find positive or nonsignificant effects of childlessness on life satisfaction and happiness in midlife and nonsignificant or negative effects in old age.

Most studies of mid- and late-life adults in Western countries find nonsignificant effects of parental status on happiness and life satisfaction, for men and women (e.g., Connidis & McMullin, 1993; Koropeckyj-Cox, Pienta, & Brown, 2007; Shields & Wooden, 2003; Umberson & Gove, 1989). In Western Europe, even among the very old, parental status does not make a decisive difference. Except for a small negative effect in Dutch men, no statistically significant association was identified linking childlessness to life satisfaction in studies of 661 Dutch aged 70–89 and 516 Germans aged 70–100 (Dykstra & Wagner, 2007). Parental status also has no effect on life satisfaction among 105 Swedes aged over 90 (mostly women) (Hilleras, Jorm, Herlitz, & Winblad, 2001).

However, in aggregate World Values Survey (WVS) data from 94 countries, the effect of childlessness on life satisfaction is positive in the ages 45–54, near zero in the ages 55–64, and negative in the ages 65+ (Stanca, 2009). Similarly, a WVS study examining happiness shows a near-zero effect in the ages 40–49, and a negative effect above age 50 that is more pronounced for women (Margolis & Myrskyla, 2011). As indicated, childless persons are generally happier than parents with resident children but equally or less happy than empty-nest parents. The results also suggest that although having children increases exposure to significant stressors, it may be an investment in future well-being.

The effects of parental status on life satisfaction and happiness are contextually sensitive. Margolis and Myrskyla (2011) find the most positive effect of having resident children in the Nordic countries, whose social policies provide extensive supports to young families. This finding is corroborated by recent Norwegian data showing a small but significant positive impact of having children (both resident and nonresident) on life satisfaction, but only among women (Hansen, Slagsvold, & Moum, 2009). A weak salutary effect of children on life satisfaction is also found among Swedish middle-aged women (Daukantaite & Zukauskiene, 2006). Furthermore, Margolis and Myrskyla (2011) show a stronger negative impact of childlessness among elderly in former socialist countries, where older people are dependent on kin for help. Yet, even in China, where children are the most important sources of social, financial, and emotional support for elderly parents (Chou & Chi, 2004), parenthood only has a very weak ($p < .10$) positive effect on life satisfaction among 13,447 elderly aged 65 and above (Zhang & Liu, 2007).

Depression and Loneliness

The effect of parental status on depression and loneliness corresponds with those for happiness and life satisfaction. In China, childlessness is related to higher levels of depression and loneliness (Chou & Chi, 2004). Research from a range of Western countries, however, shows that having children has no implications for depression and loneliness (e.g., Hansen et al., 2009; Zhang & Hayward, 2001). The only exception is a study of older people in Berlin (Wagner, Schutze, & Lang, 1999), showing that childless persons are more lonely. Yet, some Western studies link childlessness with more depression and loneliness among the widowed (see below).

A study of adults over age 40 in 24 European countries shows that in the aggregate sample, childlessness is associated with more depressive symptoms among men (compared with both residential and empty-nest parenthood), but not among women (Huijts et al., 2013). However, there is marked cross-national variation in these effects. For both sexes, childlessness is associated with more depressive symptoms in countries where society is disapproving of childlessness and where people are dependent on kinship for help in old age (some Southeast European and former socialist countries). Childlessness has no effect on depression in Northern European welfare states.

Positive and Negative Affect

Parental status also does not appear to have an effect on composite positive and negative affect scales measuring a broad range of emotions (e.g., Hansen et al., 2009), with the exception of one US study finding that empty-nest parents report somewhat higher positive affect than both childless persons and parents with residential children (Umberson & Gove, 1989).

Self-Esteem

There is mixed evidence as to whether childlessness plays a role in ▶ self-esteem. Some studies find a negative relationship (Umberson & Gove, 1989), or a negative relationship only among women (Hansen et al., 2009), and some finding no significant association (Lee & Shehan, 1989).

Moderators

Compared to studies of younger families, research on the psychological implications of parental status in older age has addressed diversity to a far lesser extent. In addition, the available studies find conflicting associations between

parental status and well-being based on demographic characteristics.

There is some indication that negative impacts of childlessness may surface or increase when coinciding with *widowhood*. A small negative effect of childlessness on *life satisfaction* among the widowed has been shown globally (Stanca, 2009), in the USA (Koropeckyj-Cox et al., 2007; Umberson & Gove, 1989), and in Australia (Shields & Wooden, 2003). Similarly, some studies find a higher risk of *loneliness* and *depression* among the widowed childless (e.g., Wagner et al., 1999), impacting men at greater rates than women (e.g., Zhang & Hayward, 2001). However, a range of Northern European studies fail to show a negative effect of childlessness on various indicators of well-being among the widowed (e.g., Dykstra & Wagner, 2007; Hansen et al., 2009).

There is little indication that the effects of parental status on various well-being outcomes differ by *education* or socioeconomic status in midlife and old age (Hansen, Slagsvold, & Moum, 2008, 2009).

A key distinguishing factor among the childless is whether they are *childless for voluntary or involuntary reasons*. The transition to biological childlessness can be a major crisis for couples, associated with ▶ stress, depression, and low life satisfaction, especially for women (see Hansen, 2012). It is unclear whether this vulnerability persists, as one study finds no difference in life satisfaction between voluntary and involuntary women aged 25–50 (McQuillan, Stone, & Greil, 2007). A separate study of older men and women also finds no difference for happiness, but the involuntary childless (especially women) report lower life satisfaction than the voluntary childless (Connidis & McMullin, 1993).

Discussion

There is little to suggest that not having children jeopardizes well-being in midlife and old age. A growing international literature shows that childlessness has few costs for psychological well-being and may even be associated with enhanced well-being. Compared to parents with resident children, the childless are typically happier and more satisfied with life and report less psychological distress. The childless seem to benefit from avoiding many of the strains of parenthood, such as time constraints, daily demands, marital stress, and ▶ work-family conflict (Hansen, 2012).

The literature also indicates that although infertile persons may go through a phase of finding life empty and unfulfilling, involuntary childlessness usually does not cause a continuing sense of loss. Childless adults generally seem to find companionship, support, and a sense of meaning in ways other than parenting (e.g., via marital, friendship, and work roles). It is long established that childless persons show great creativity in negotiating alternative social ties over the life course. For example, the childless report more active ties with friends and extended family (e.g., siblings, cousins, nieces, nephews), and these often serve as sources of companionship and support for childless people (e.g., Dykstra & Wagner, 2007).

Importantly, however, there are conditions under which childlessness may be detrimental to well-being. First, childlessness may reduce well-being in cultures less accepting of (voluntary) childlessness. Childlessness may also compromise well-being when it coincides with ▶ widowhood or poor health (mobility), especially in countries where old-age support is largely the responsibility of the family. Although childless persons tend to negotiate alternative ties over the life course, these relationships may not be as reliable in providing long-term support. For this reason, childless elderly more often than parents suffer support deficits in older age, even in an advanced welfare state like Sweden (Larsson & Silverstein, 2004). The reason why the widowed may fare worse than the never-married is because whereas never-married childless adults tend to be quite successful in building alternative networks over the life course, the married, and especially men, more often rely exclusively on their partner for support and companionship (Dykstra & Wagner, 2007).

One potential caveat concerns the stronger selection of socially isolated older childless persons than parents into institutionalized care (e.g., Wagner et al., 1999). The elderly childless respondents living at home (and thus eligible to taking part in the surveys) may constitute the

most socially integrated and most happy among childless persons, thus masking the psychological benefits of having children for the oldest cohort. Concomitantly, more research is necessary for investigating the consequences of parental status in the frail and the oldest old, who typically are not represented in large surveys.

This review resolves and debunks some of the myths about parental status and well-being. This clarification is important as commentators and policymakers are trying to curb and understand the consequences of the rapid growth in childlessness across Western nations. Estimates show that childlessness among women born after 1970 is likely to range between 15 % and 25 % in industrialized countries (Sobotka, 2004).

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Children and Parents' Values

▶ Values of Adolescents and Their Parents

Children as Information Technology (IT) Consumers

▶ Children's IT Use

Children from Birth to Age Five, Quality of Life in

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Definition

From birth to age five, children develop at a faster pace than any other time. Also unique to this developmental period is that behavior does not develop in isolation. Young children require modeling, reinforcement, safety, and support unlike humans at any other age (Shonkoff & Phillips, 2000). Therefore, elements largely external to a young child set the stage for development and define the parameters for his/her "quality of life." For children from birth to age five, quality of life is defined by the quality of their relationships, environments, and learning.

Description

Quality of Parent–child Relationship

Parenting is a bidirectional process, requiring active participation from both the parent(s) and the child (the term "parent(s)" used here is inclusive of guardians and primary home caregivers) (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000). Multiple, complex variables influence the quality and characteristics of parent–child relationships. But the importance of parent–child relationships is not to be underestimated as it is among the most potent predictors of adjustment and quality of life throughout the lifespan (Huebner, Suldo, & Gilman, 2006).

A parents' role in the relationship is affected by their own personality (Belsky & Barends, 2002), level of empathy for the child (Kochanska, 1997), and ability to be a secure attachment figure for the child (Bowlby, 1988). A child's role is heavily influenced by his/her temperament and needs.

Temperament. "Temperament" describes a young child's emotional and physiological reactivity and regulation. More specifically, a child's emotionality, behavior, activity level, and sociability collectively define his/her temperament (Rothbart & Bates, 2006). A child's temperament has a tendency to negatively influence the quality of their relationships when they express negative emotionality (i.e., distress, anger, fear), behavioral inhibition (i.e., withdrawing from new people or situations), a high activity level, and a lack of sensitivity to socialization (Derryberry & Rothbart, 1997).

Although temperament is biologically based, expanding research shows moderating effects of parenting on child outcomes. A parent's responsiveness can serve as a protective factor for a child with a difficult temperament (Kochanska, Aksan, & Carlson, 2005). A high level of parental responsiveness creates a positive reciprocal and harmonious relationship between the parent and child. This kind of a relationship can, in turn, lead a parent to feel increased cooperation and eagerness toward socialization of the child. One critical index of the early parent–child relationship is attachment.

Attachment. A child's confidence in the availability of their parent(s) describes their attachment. First, a child must feel that the parent offers a secure, consistent presence. Second, the child must see the parent as someone who offers support, protection, and comfort in times of distress (Bowlby, 1988). The extent to which a child has confidence in these two areas determines if they display secure, responsive, anxious-ambivalent, or disorganized-disoriented attachment (Ainsworth, Blehar, Waters, & Wall, 1978).

Secure children demonstrate the highest quality of life because their parents are available, responsive, and sensitive to their feelings and needs, which permit the child to fully explore their world. Children with secure attachments are also able to acknowledge and cope effectively with negative emotions, thereby offsetting temperament and enhancing development of other relationships. Over time, secure children demonstrate high levels of self-efficacy and self-worth (Bowlby, 1988), which have been related directly to quality of life in adolescence and adulthood (Feeney & Van Vleet, 2010; Suldo & Huebner, 2004).

Quality of Environment

The environments in which children live and learn play an important role in their quality of life. Most children spend the majority of time in home and child care settings. Although relationships are most foundational for supporting a child's well-being, relationships develop and function within physical environments. At a minimum, home and child care environments must ensure a child's physical safety and meet basic needs (Shonkoff & Phillips, 2000). But environments can be structured to specifically support and enhance future development.

Young children learn from the modeling of others and the reinforcement of their own behaviors. Adults teach young children how to behave, interact, solve problems, and evaluate themselves. Threaded throughout these interactions are elements of expectation and consistency.

First, in order for children to know what is expected, rules and boundaries are necessary. Adults in the environment must state clearly expectations and discuss them with a child, set specific goals, emphasize a child's effort to comply, and ensure that the child understands consequences when expectations are not met (Christenson, 1999). Second, young children particularly thrive with the implementation of consistent routines, which help them to remember and meet expectations. But because the children are so young, they require significant monitoring. In order for children to know how to modify their behaviors over time, reinforcement of behaviors must be frequent and consistent (Christenson, 1999).

When children are provided with operational parameters grounded in positive relationships, they can function in their various environments with high levels of happiness and well-being (Park & Peterson, 2003). Moreover, when young children learn to operate in environments with structure and clear expectations, they encounter contexts and demonstrate skills that prepare them for a successful school experience.

Quality of Early Learning/School Preparation

Long before formal schooling begins, children develop social and learning skills critical to their success in school settings (Graue, 1999). Research has shown that when a child starts school without the foundational skills to engage competently, they are at increased risk for academic difficulties and social problems, which ultimately impacts well-being and quality of life negatively (Masten et al., 1995). Therefore, the first 60 months of life represent a critical period for instruction. From birth to age five, the two key areas of learning for school preparation include academic (language, early literacy, early numeracy) and social (adult, peer, and learning-related) skills.

Academic Skills. Although kindergarten typically marks the beginning of formal reading, writing, and mathematics instruction, foundational concepts develop from birth. Language, the cornerstone of reading, begins to develop immediately and over time reflects a child's general knowledge base. Young children must be exposed to dense, rich vocabulary and encouraged to produce a high quantity of diverse words (Hart & Risley, 1995). Children must master other important early reading/writing concepts including phonological awareness, concepts of print, letter-sound correspondence, and awareness of grammatical structure and demonstrate phonological memory, rapid naming, and print motivation (Adams, 1990; Snow, Burns, & Griffin, 1998). Necessary mathematics concepts include counting, comparing, ordering grouping, simple addition and subtraction, shapes, measurement, and mathematical problem solving (Clements, 2004).

It is a common misconception that children are not ready to learn academic concepts until kindergarten. Rather, adults in early environments must demonstrate and explicitly teach language, reading, writing, and mathematics concepts using developmentally appropriate methods. Adults must also provide many opportunities for academic learning, lest the child in their care not be adequately prepared to meet academic expectations in formal school.

Social Skills. Social development is a complex construct given that different contexts demand specific skills. Young children are expected to acquire and demonstrate prosocial skills that differ depending on whether they are interacting with adults, peers, or learning environments.

Adult-related social skills are rooted in the parent–child relationship(s). Parents who model calm discussion as part of discipline, nonaversive conflict resolution, and warm and open interaction are likely to have children who demonstrate habits and characteristics valued by other adults (Rimm-Kaufman, Pianta, & Cox, 2000). Children who have appropriate relationships with adults are also more likely to have mutual friendships with same-age children, high levels of peer acceptance, and overall positive adjustment (Clark & Ladd, 2000).

Successfully establishing peer relationships requires specific social skills that center on initiation and maintenance in interaction, sharing or turn taking, and showing respect (McClelland & Morrison, 2003). The formation of positive peer relationships early in school increases the chance that children will continue to feel a sense of belonging in later years, enjoy school life, achieve academically, and experience overall well-being (Natvig, Albreksten, & Qvarnstrom, 2003). There is also evidence that children with pro-social peer interaction skills are likely to demonstrate learning-related social skills (Ladd, Birch, & Buhs, 1999).

Learning-related social skills, including following directions, demonstrating on-task behavior, obeying rules and appropriately self-regulating, have academic and social implications. Preschool and kindergarten teachers have rated learning-related social skills such as listening to and complying with the teacher among those most important for success in kindergarten (Rimm-Kaufman et al., 2000). Demonstrating learning-related skills concomitantly with adult and peer social skills helps to ensure positive school adaptation and provides a child with confidence to enjoy a healthy school experience.

Conclusion

The first 60 months of a child's life are filled with expectations, changes, and possibilities. Opportunities abound for supporting and enhancing development. At the most basic and essential levels, the quality of a child's relationships, environments, and learning opportunities must be examined to maximize the child's quality of life to promote positive outcomes.

Cross-References

- ▶ Attachment
- ▶ School Readiness

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Children Living Without Their Fathers

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Synonyms

Children with absent fathers

Definition

Children living without their fathers are minors whose primary living arrangement does not include a male biological, step-, or adoptive parent. Children living without their fathers include those living in single-mother households as well as those living with other relatives or guardians.

Description

In the United States, about 36 % of students in grades K-12 do not live with their fathers, including 28 % of white students, 39 % of Hispanic students, and 69 % of black students (DeBell, 2008, using data from 2003). Given that most children in single-parent families live without their fathers and that about half of American children will live in a single-parent

household at some point in their lives (Andersson, 2002), around half of American children will live without their father at some point. These numbers reflect dramatic increases since the middle of the twentieth century (Sigle-Rushton & McLanahan, 2004), and increases have been observed in other countries as well. The widespread nature of the phenomenon has been a cause for concern based on evidence that living without a father may harm children's well-being. There are important differences in well-being between children living with and without their fathers, but these differences are mainly attributable to indirect rather than direct effects of father absence, as will be elaborated below.

There is a great deal of research relevant to the well-being of children living without their fathers, although only a tiny fraction of this research is based on nationally representative samples that specifically compare children living with their fathers to children living without their fathers. Much of the relevant research is based on convenience samples and uses data that only loosely compare father-absent to father-present households. For example, when research compares children living with single mothers to other children, or compares children in one-parent families to children in two-parent families, much of the difference between these categories is indeed accounted for by the presence or absence of the child's father. Yet it is important to distinguish the details of family structures in order to isolate the actual mechanisms that affect ▶ child and family well-being. In particular, the distinction between living in a single-parent household and a father-absent household is important if we are to distinguish the effect of a father's absence from the effect of having just one adult in the household, regardless of that adult's gender and relationship to the child.

At issue in such comparisons are at least four cross-cutting variables that comprise family structure: the gender of the adult, the relationship of the adult to the child, the number of adults in the household, and the relationships among the adults in multi-adult households. Children living without their fathers may live with any number of adults, but they usually live with just one. They may live with adults of either gender, or both, but they usually live with a woman. And they may live with adults of any relationship other than their biological, step-, or adoptive father, but they most often live only with their mother.

With these considerations in mind, empirical evidence has consistently shown that children living without their fathers have lower well-being than children living with their fathers. The more loosely measured comparisons (relying on categories such as single-parent vs. two-parent households or single-mother vs. other households) have found that children living without their fathers have worse well-being by a raft of measures: they have worse cognitive development, have less academic success, have more discipline problems including ▶ adolescent problem behavior, engage in more risky behavior such as drug use, are in worse health, are less likely to finish high school (▶ Early School Leaving or ▶ School Dropout) and attend college, and have less financial success as adults (Sigle-Rushton & McLanahan, 2004).

Comparing father-absent to father-present children in a large nationally representative sample, DeBell (2008) reported that children without a resident father had worse health (54 % of children living without their fathers were reported by the parent or guardian to be in excellent health, compared to 64 % in father-present households), were more likely to have ADHD (11 % compared to 6 %), received lower grades in school (34 % compared to 49 % "mostly As"), and were more likely to have repeated a grade (16 % compared to 7 %) and to have been suspended or expelled from school (18 % compared to 7 %). Children without a resident father were also less likely to enjoy school and to have a parent involved in school activities.

The above observations notwithstanding, it is less clear *how* the absence of fathers reduces children's well-being. When studies with representative samples have controlled for socioeconomic factors such as income and parental education, the main-effect association between father absence or single-parent status

and reduced child well-being has often disappeared altogether or been reduced to small effect sizes (Carlson & Corcoran 2001; DeBell, 2008; Entwisle & Alexander, 1996; Hampden-Thompson, 2009). Thus, the importance of father absence is nuanced: father absence is strongly associated with lower quality of life for children, but appears not to play a strong direct causal role in reducing the quality of children's lives.

This paradox has two main explanations. One is that fathers tend to be absent from the lives of children who are otherwise already disadvantaged, for instance, by ▶ child poverty, or having a teenage mother, or having a mother with very little ▶ education, or some combination of these disadvantages. Father absence under these circumstances is just one of many things that may make a child's life a little harder and is not likely to have a transformative effect on its own.

The second is that when father absence does cause harm, it does so indirectly by depriving a family of financial and parental resources. In colloquial language, it is still correct to say that father absence harms children, but to be precise, we should say that father absence characteristically has indirect effects: father absence deprives the family of income, parenting labor and involvement and time (▶ parental time and child well-being), and other resources, and it is mainly the paucity of those resources that makes children worse off, not the father's absence per se. This is analytically important because this mechanism is not particular to ▶ fatherhood, and the loss of income or parenting labor for any reason, such as the mother's absence, might have the same effects. A policy implication of this finding is that the well-being of needy children living without their fathers can be improved by providing resources to these families even if fathers remain absent (Pong, Dronkers, & Hampden-Thompson, 2003).

A third perspective is controversial. This is that fathers *as fathers* make unique contributions to raising children, independent of money or parenting resources they may bring to the family, so that father absence has a direct harmful effect by depriving children of the benefits of fathering, distinguished from ▶ mother-child interactions or general parenting. This perspective is based on gender differences and the theory that mothers and fathers each make unique contributions to child development. In this perspective, traditional views of gender roles imply that mothers nurture and foster emotional skills more effectively than fathers and that fathers apply discipline and foster cognitive skills more effectively than mothers (Carlsmith, 1964; Popenoe, 1996; Thompson, McLanahan, & Curtin, 1992). There is evidence to falsify hypotheses such as these (DeBell, 2008; Downey, Ainsworth-Darnell, & Dufur, 1998), although some small effects do appear to exist even after controlling for other factors (DeBell, 2008). A more fruitful line of inquiry may be to consider not just the presence or absence of fathers, but their parenting involvement and behavior (Flouri, 2007).

Cross-References

- ▶ Marriage, Cohabitation, and Child Care in the USA
- ▶ Mother-Father Relationship

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Children Sexual Abuse

▶ Child Sexual Abuse

Children with Absent Fathers

▶ Children Living Without Their Fathers

Children's Assets

▶ Positive Indicators of Child Well-Being

Children's Audiovisual Media Use

▶ Children's IT Use

Children's Communication Media Use

▶ Children's IT Use

Children's Health Index

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Synonyms

Child Development Index (CDI); Child health index of goteborg (Northeast); Child Health Indicators of Life and Development (CHILD); Children's health indicators; Headline indicators for children's health, development, and well-being; Indicators of child health and well-being in Greenland; Municipal indicators for children's health in Sweden

Definition

The children's health index is defined as the quantitative measure of children's well-being and the monitoring of children's health and related factors on a national or international level.

Description

Child health indicators is a topic of great interest in many countries. In the last years, a significant number of research studies have been done on international, on national, and on sub-national level. The relevant research studies examine the children's health and its dimensions, individually or as a determinant factor of general systems monitoring welfare, ▶ sustainability, and welfare policies e.g., (United Nations Children's Fund [UNICEF], Organisation for Economic Co-operation and Development [OECD], European Union [EU], Benotti, 2010, Craig, 2010, Hanafin & Brooks, 2010, Tamburlini, Ronfani, & Buzzeti, 2001). The experience of the childhood development in early years affects lifelong health and well-being in many aspects. The children's health index is a measurement

Dimensions of child well-being	Average ranking position (for all 6 dimensions)	Dimension 1 Meterial well-being	Dimension 2 Health and safety	Dimension 3 Educational well-being	Dimension 4 Family and peer relationships	Dimension 5 Behaviours and risks	Dimension 6 subjective well-being
Netherlands	4.2	10	2	6	3	3	1
Sweden	5.0	1	1	5	15	1	7
Denmark	7.2	4	4	8	9	6	12
Finland	7.5	3	3	4	17	7	11
Spain	8.0	12	6	15	8	5	2
Switzerland	8.3	5	9	14	4	12	6
Norway	8.7	2	8	11	10	13	8
Italy	10.0	14	5	20	1	10	10
Ireland	10.2	19	19	7	7	4	5
Belgium	10.7	7	16	1	5	19	16
Germany	11.2	13	11	10	13	11	9
Canada	11.8	6	13	2	18	17	15
Greece	11.8	15	18	16	11	8	3
Poland	12.3	21	15	3	14	2	19
Czech Rebublic	12.5	11	10	9	19	9	17
France	13.0	9	7	18	12	14	18
Portugal	13.7	16	14	21	2	15	14
Austria	13.8	8	20	19	16	16	4
Hungary	14.5	20	17	13	6	18	13
United States	18.0	17	21	12	20	20	–
United Kingdom	18.2	18	12	17	21	21	20

Children's Health Index, Fig. 1 An overview of child well-being (Source: OECD (www.oecd.org/els/social/childwellbeing))

of well-being and ▶ progress of a society because children are recognized as vulnerable population group (Fig. 1).

The European Commission is concerned with the health monitoring program of the Directorate General for Health and Consumer Protection, and it has commissioned the Child Health Indicators of Life and Development (CHILD) project as part of health monitoring project. The project commenced in 2000 and reported in 2003 (Rigby, Köhler, Blair, & Mechtler, 2003). The CHILD project analyzed the child health in 15 EU member states (plus Iceland and Norway) of the European Economic Area (EEA) countries. The overall results show lists of potential children's health indicators which are identified and scrutinized for practicality and definitional clarity, such as data availability and their comparability. The result also presents a set of 38 indicators which gave a comprehensive picture of child health in Europe.

Moreover, the Children's Environment and Health Action Plan for Europe (CEHAPE and WHO Regional Office for Europe, 2009) and the European Commission have reported a key early document, and they recommended a set of indicators measuring policy, exposure, and health outcome – all dimensions of children's well-being caused by their environment (Tamburlini, Von Ehrenstein, & Bertollini, 2002; UNICEF, 2007). The Australian Ministry has also published the "Headline indicators for children's health, development and well-being, 2011." The report provides the latest available information on how Australia's children are faring according to the Children's Headline Indicators priority areas, covering health status, risk and

protective factors, early learning and care, and ▶ family and community environments. These indicators are designed to evaluate policy development by measuring progress on agreed priority areas for children. The results show that Australian children are faring well, but there are variations between states and territories and across particular population or different social/economic groups.

Many studies at the national level have been published regarding the performance of children's health and environment. Cited examples are the "Municipal indicators for children's health in Sweden" (Köhler, 2006), "Indicators of child health and well-being in Greenland" (Niclasen & Köhler, 2009a, 2009b), and "A Child Health Index for the Northeastern parts of Göteborg" (Köhler, 2010). Bradshaw, Hoelscher, and Richardson (2007) give a detailed overview of the global and national initiatives on the conceptualization of child well-being. They analyzed various OECD data on child health (from sample surveys and indicator databases of international organizations). This was the first attempt at combining large sets of indicators of child well-being into an index:

1. The component of health that represents the under-five mortality rate expressed as a percentage on a scale of 0 to 340 deaths per 1,000 live births
2. The component of nutrition that represents the percentage of under-fives who are moderately or severely underweight (below two standard deviations of the median weight for age of the reference population)
3. The component of education deprivation that represents the percentage of primary school-age children who are not enrolled in school or else; the opposite net primary enrolment rate

According to the CDI results, the children's health conditions are varying among the regions and the countries. The worst region is the Sub-Saharan Africa (index = 35) reflecting the high level of deprivation for all the partial components of CDI with slow progress of improvement. On the other hand, the Middle East and North Africa have a scoring of 12 and show some signs of progress with many variations within the regions. East Asia has made a progress in child well-being the last years (index = 8.5) when South Asia presents a high level of deprivation (index = 26.4) with slow progress mostly because of the high levels of the nutrition indicator. The Latin America and Central and Eastern Europe made substantial progress in improving child well-being with a scoring of 7 and 9, respectively, mostly because of some leader countries that made the most significant progress (e.g., Turkey). Finally, the developed countries (in North America and West Europe) have a low level of deprivation (2.1 scoring) with small variations among the countries.

The Child Development Index was developed by Save the Children UK in 2008 through the contributions of Terry McKinley (director of the Centre for Development Policy and Research at the School of Oriental and African Studies) at the University of London. On the 2008 report "Holding governments to account for children's well-being" by Sarah Hague, Sophie Elmhirst, and David Mepham at Save the Children UK, they highlight some major conclusions:

- Higher levels of economic growth and income in the region do not widely support the reduction of child deprivation.
- The levels of ▶ child poverty, mortality, and hunger are still high in many countries around the world, particular in African countries.
- There is a gap between children's well-being and adult well-being. There is not a vice versa proportional relationship.
- Countries within same regions present variations in terms of children's health policies and well-being. Moreover, countries with similar development can have different levels of children's health scoring. This means that there are regional or national factors like political and policy choices that affect enormously the scores of CDI among the countries and the regions.

Discussion

Children's health indicators have great importance in modern societies. There are strong relationships

between some regions and the determinant dimensions that affect the children's health indicators. For example, poverty affects many aspects of child well-being and it can influence the children's health, children's achievement at school, etc. ▶ Economic growth and income are inadequate measures of children's well-being. The need for a multidimensional approach to well-being is essential because it will improve the monitoring and policy effectiveness.

On the other hand, the quality, the results, and the data availability of the existing published reports are questionable. Thus, it is difficult to exploit a children's health index that covers the childhood health panorama. Moreover, there is a lack of indicators on the determinants of health, such as individual growing environment and its influence on health, nutrition, or social and cultural habits, and there are doubts regarding the method of aggregation for the composite indices, like CDI. In particular, the CDI is obtained by averaging the three variables on health, education, and nutrition; however, the three components are on different scales and have different ranges. Despite all these shortcomings, the children's health indicators still provide important insights about the child well-being across countries.

Cross-References

- ▶ Child and Family Well-Being
- ▶ Child Health Questionnaire (CHQ)
- ▶ Childhood Diseases and Disabilities
- ▶ Health Behavior in School-Aged Children (HBSC)

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Children's Health Indicators

▶ Children's Health Index

Children's Influence on Parents' Well-Being

▶ Parent-Child Relationship(s)

Children's Information Communication Technology (ICT) Use

▶ Children's IT Use

Children's Information Technology (IT) Consumption

▶ Children's IT Use

Children's IT Use

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Synonyms

Children as Information Technology (IT) consumers; Children's audiovisual media use; Children's communication media use; Children's Information Communication Technology (ICT) use; Children's Information Technology (IT) consumption; Children's mass media use; Children's New Information Communication Technology (NICT) use

Definition

Children as IT consumers refers to children and adolescents' use of ICTs such as computers, Internet, video games, cell phone (mobile telephone), and ▶ social networks and how said use affects their ▶ quality of life and/or ▶ well-being. Their use of these technologies may also be related to availability (whether they have their own or use others that are not theirs), place and frequency of use (at home, at school, at friends' houses, at relatives' houses), hours of use, or even the feelings they experience when they use these different technologies (boredom-fun, learning-not learning, wasting time or not, usefulness-lack of usefulness, passivity-activity, loneliness-companionship).

Description

Studies into children's relation to the media are generally quite old, the earliest date back to 1800, when children and adolescents in Europe and North America used to read so-called penny dreadfuls or dime novels (see Drotner, 1988). During the twentieth century, most researchers in the field carried out research revolving around literature, films, and some forms of mass media all focused on childhood. In the second half of the twentieth century, research into childhood and media focused on studying the effects of, above all, television (McQuail, 1987). Toward the end of the twentieth century and at the beginning of the twenty-first century, we encounter other ways of studying the relationship between media use and childhood and adolescence. An example of this are audience studies used to research the use of television by children in different contexts such as in the home and family (Buckingham, 1993) and, later, the use of Internet or computers in the home, in schools, or among peers (see Buckingham & Willet, 2006). Nowadays, we find a significant number of studies exploring how children and adolescents use other audiovisual media such as video games, mobile telephones, and, more recently, social networks (see as an example Bryce & Rutter, 2003; Casas, 2001; Casas, González, Figuer, & Malo, 2007; Ling, 2005; Malo, 2009; Rees & Noyes, 2007).

Historically, it is also possible to identify two opposing viewpoints in research on the relationship between children and adolescents and audiovisual media: (a) on the one hand,

there is the idea that childhood as we know it is "disappearing" and that media are the main cause (see *The disappearance of Childhood*, Postman, 1983), and (b) on the other, there is the idea that media are now a liberating force for children – as they are creating a new "electronic generation" which is more open, more democratic, and more social than that of their parents (see *Growing up digital*, Tapscott, 1998).

From the perspective of quality of life, we find an important tradition of studies highlighting how the use of audiovisual media among children and adolescents affects their subjective well-being. As has been observed in diverse studies, interpersonal relationships are one of the most important specific areas of life satisfaction for children and, above all, adolescents (Casas et al., 2007). The widespread recent acceptance of NICTs among the child and adolescent population and the role these have played in maintaining and improving their interpersonal relationships, particularly with friends, has led researchers in the field to study how the use and consumption of certain technologies may impact their quality of life and well-being. If we take the definition of quality of life proposed by Ardila (2003), we understand it as a multidimensional construct comprising both objective (availability of goods and services) and subjective (evaluating the objective dimension in relation to one's own life) aspects of different life domains. Authors such as Diener, Suh, Lucas and Smith (1999) consider well-being to be a subjective component of the concept of quality of life and that it comprises both cognitive aspects (overall satisfaction or broken down into domains) and affective aspects (the presence of positive and negative feelings). Bearing in mind this position, we might therefore consider audiovisual media used by children and adolescents to form part of the objective dimension of quality of life and the perceptions and evaluations they have of the use of technologies to fit with the subjective dimension. This, in turn, might lead us to think that the subjective interpretation of these material goods would affect their personal well-being.

The scientific literature contains classic studies such as that conducted by Kubey and Csikszentmihalyi (1990) on the impact of television use on adult well-being, including some considerations that may be extrapolated to children and adolescents. Other researchers have focused their studies on the impact that other audiovisual media have on well-being among the youngest population. By way of example, we can cite some recent studies which analyze how the use of certain technologies such as Internet, mobile phones, or social networks may be affecting the subjective well-being of children and adolescents. Medrano and Cortés (2007) state that young people use television to understand and explore their own world, searching for their own identity by watching parasocial models. Other studies state that Internet use by children and adolescents can have a negative impact on their well-being (*Displacement Hypothesis*) (Nie, 2001) or, conversely, an effect that fosters well-being (*Stimulation Hypothesis*) (Valkenburg & Peter, 2007). Authors such as Sirgy, Lee and Bae (2006) and Sirgy, Lee, Kamra and Tidwell (2007) have developed well-being indicators for Internet and mobile phone users. More recently, authors such as Holder, Coleman and Sehn (2009) have observed how free-time activities related to physical activities (active) correlate positively with their well-being, while those that can be categorized as being more passive (such as playing video games or watching television) correlate negatively.

Below is a review, albeit not an exhaustive one, of the principal sources of information (books, journals, databases, organizations, projects, and networks) that list data published around the world regarding use, availability, and other aspects related to the consumption of audiovisual media among children and adolescents.

(a) Handbooks

The handbooks presented here constitute some of the reference manuals for research into children and adolescents' use of ITs. Some of them list the main European and international

studies into *Children, Young People, and Media;* others focus on providing an overview of the *Social Context of ICT Use*; and others present data on studies into young people and children's use of a *Specific Audiovisual Media* (such as social networks, the Internet, or mobile phones).

Children, Young People, and Media

- Singer, D. G., & Singer, J. L. (2011). *The Handbook of Children and the Media*. Thousand Oaks, CA: Sage.

  This book includes updated articles about how children use, enjoy, learn from, and are advantaged or disadvantaged by regular exposure to television and other electronic media.
- The International Clearinghouse on Children, Youth and Media (2009). *Young People in the European Digital Media Landscape. A Statistical Overview*. University of Gothenburg: Nordicom.

  This book presents some general data about young people in the European digital media landscape (Internet, mobile phone, games, risk, and television) and some specific statistics about young people's media use in Sweden and other Nordic countries.
- Strasburger, V. C., Wilson, B. J., & Jordan, A. B. (2009). *Children, Adolescents and the Media*. London: Sage.

  This book provides research-oriented background to the developmental impact of the varied interactions children and adolescents have with the modern media.
- Drotner, K., & Livingstone, S. (2008). *The international handbook of children, media and culture*. London: Sage.

  This handbook aims to map out diversities and commonalities in children's media culture around the world.
- Casas, F., Rizzini, I., September, R., Mjaavatn, P. E., & Nayar, U. (2007). *Adolescents and Audio-visual Media in Five Countries*. University of Girona, Spain: Documenta Universitaria.

  This book is supported by the Childwatch International Research Network (CWI) and is a compilation of international research on children and adolescents' media use in five countries (Norway, India, Brazil, South Africa, and Spain).
- Ekström, K. M., & Tufte, B. (2007). *Children, Media and Consumption. On the front edge*. The International Clearinghouse on Children, Youth and Media. University of Gothenburg: Nordicom.

  The aim of this book is to shed light on new types on marketing such as product placement, advertising on the Internet and mobile phones in relation to young people, and media consumption.
- Buckingham, D. (2007). *Beyond Technology. Children's Learning in the Age of Digital Culture*. Cambridge: Polity Press.

  This book discusses the educational use of media inside and outside school.
- Livingstone, S. (2002). Y*oung People and New Media*. London: Sage.

  This book combines a literature review with empirical research on young people's use of old and new media and provides in-depth discussion of the growing relationship between the media and childhood, family, and home.
- Livingstone, S., & Bovill, M. (2001). *Children and Their Changing Media Environment: A European Comparative Study*. Mahwah, NJ: Lawrence Erlbaum Associates.

  This book brings together researchers from 12 countries (Belgium, Denmark, Finland, France, Germany, the United Kingdom, Israel, Italy, the Netherlands, Spain, Sweden, and Switzerland) and presents findings on the diffusion and significance of new media and information technologies among children and young people.

The Social Context of ICT Use

- Katz, J. E. (2003). *Machines that Become Us. The Social Context of Personal Communication Technology*. New Brunswick, NJ: Transaction Publishers.

  This book presents some theoretical perspectives regarding ICTs and some interesting national and cross-cultural studies about adolescents' use of mobile phones, computers, and the Internet.

- Lievrouw, L. A., & Livingstone, S. (2002). *Handbook of New Media. Social Shaping and Consequences of ICTs*. London: Sage.

  This book highlights research on socially framed technologies and on studies that document circumstances in which strong cultural concerns or social norms have been developed around ICTs.

Specific Audiovisual Media

- Livingstone, S., & Haddon, L. (2009). *Kids Online. Opportunities and risks for children*. Portland, USA: The Policy Press.

  A book that records the expertise generated by the EU Kids Online project on social implications and consequences deriving from opportunities and risks identified by children, young people, and their families on the Internet and in new online technologies.
- Prensky, M. (2005). *Don't bother me, mom-I'm learning*. St. Paul, EUA: Paragon House.

  A book about how computer and video games are preparing kids for twenty-first century success. To find out more about publications from this author, visit http://www.marcprensky.com/
- Ling, R. (2004). *The Mobile Connection. The Cell Phone's Impact on Society*. San Francisco, CA: Morgan Kaufman.

  This book, based on worldwide research involving tens of thousands of interviews and contextual observations, looks into the impact of the phone on our daily lives. To find out more about publications from this author, visit http://www.richardling.com/index.php
- Katz, J. E., & Aakhus, M. (2002). *Perpetual Contact. Mobile Communication, Private Talk, Public Performance*. Cambridge: Cambridge University Press.

  This book provides an overview of the use of mobile phones and social interaction.

(b) Reviews

The first journal presented in this section is one of the most up to date and one to have also had the greatest international impact in the publication of specific research on *Children, Youth, and Media*. The other journals presented here do not publish articles on this subject alone but may include a related article of interest.

Children, Youth, and Media

- *Journal of Children and Media* is an interdisciplinary and multi-method peer-reviewed publication that provides a space for discussion by scholars and professionals on the study of media in the lives of children and adolescents.

General Studies on Media

- *New Media and Society* is an international journal that publishes key research from communication, media, and cultural studies.
- *Media Psychology* is an interdisciplinary journal of psychology and media communication. The topics include media uses, processes, and effects.
- *Science, Technology, & Human Values* is an international and interdisciplinary journal containing research, analyses, and commentary on the development and dynamics of science and technology, including their relationship to politics, society, and culture.
- *Communication Research* is a review that publishes articles exploring the processes, antecedents, and consequences of communication in a broad range of societal systems.
- *Information, Communication & Society* explores a diverse range of issues relating to the development and application of information and communication technologies (ICTs).

Journals on Childhood and Adolescence Not Specific to Media (but Which May Include the Subject)

- *Childhood* is an international peer-reviewed journal and forum for research relating to children in global society. It publishes theoretical and empirical articles, reviews, and scholarly comments on children's social relations and culture, with an emphasis on their rights and generational position in society.
- ▶ *Child Indicators Research* is an international peer-reviewed quarterly that focuses on measurements and indicators of children's

well-being and their usage within multiple domains and in diverse cultures.

- *Journal of Youth and Adolescence* provides a single, high-level medium of communication for psychologists, psychiatrists, biologists, criminologists, educators, and professionals in many other allied disciplines who address the subject of youth and adolescence.
- *Journal of Adolescence* is an international and cross-disciplinary journal that addresses issues of professional and academic importance concerning development between puberty and the attainment of adult status within society.
- *The Journal of Early Adolescence* publishes articles that increase our understanding of individuals aged 10 through 14. The journal is designed to present major theoretical papers, state-of-the-art papers, and current research, as well as reviews of important professional books and early adolescent films and literature.
- *Journal of Family Communication* publishes papers that advance our understanding of the communication processes within or about families, the intersection between families, communication, and social systems, such as mass media, education, health care, and law and policy.
- ▶ *Social Indicators Research* is an international and interdisciplinary journal for quality of life measurement. Topics covered include health, population, shelter, transportation, the natural environment, social customs and morality, mental health, law enforcement, politics, education, religion, the media and the arts, science and technology, economics, poverty, and welfare.

(c) Databases, Surveys, Organizations, Projects, and Networks

- *The International Clearinghouse on Children, Youth and Media* at Nordicom, University of Gothenburg, Sweden. This is an international knowledge center that collects research and other information on children, youth, and media around the world. Below is an overview of the resources available on its website:

  Publications: In this section, we find Yearbooks; Newsletters; Other Publications related to audiovisual media, childhood, and adolescence; and finally Electronic Publishing.

  Links and Databases: This section provides information on four aspects – ▶ Media Literacy Database-MLD offers a collection of research, knowledge, and useful resources in the field of ▶ media literacy from all parts of the world; Organizations and Networks presents a list of over 240 organizations, networks, councils, etc. who work with children, young people, and media around the world; Literature Database on Media Violence Research; and, finally, Declarations lists international and regional declarations and resolutions on children and media.

  Special Themes: This section lists publications presented by researchers from around the world classified according to different topics – Children in the World; Media Influences; Measures and Regulations; Images of Children and Young People; Media Violence; Advertising and Consumption; Media Contents and Media Production; Media Access and Media Use (this includes specific data on "children's IT use"); Media Education, Media Literacy, Awareness; Research on Children, Youth and Media Generally; Children's and Young People's Participation; and Internet, Computer Games, NICT.

  Australia Council on Children and the Media (ACCM) is Australia's best source of up-to-date information on media and children, for parents and caregivers, professionals, students, and researchers.
- ▶ *Eurobarometer*: It is a series of surveys regularly conducted on behalf of the European Commission. The surveys and studies address major topics concerning European citizenship: enlargement, social situation, health, culture, information technology, environment, the Euro, defense, etc. Below we present some

of the surveys referring to children and adolescents' IT use:

▶ Special Eurobarometer 359: Attitudes on data protection and electronic identity in the European Union (November–December 2010).

▶ Special Eurobarometer 335: E-Communications Household Survey (November–December 2009).

▶ Special Eurobarometer 293: E-Communications Household Survey (November–December 2007).

▶ Special Eurobarometer 274: E-Communications Household Survey (November–December 2006).

▶ Special Eurobarometer 249: E-Communications Household Survey (December 2005–January 2006).

▶ Special Eurobarometer 250: Safer Internet (December 2005–January 2006).

Qualitative study: Safer Internet for Children. Qualitative study in 29 European countries (March–May 2007).

- *Child Trends* is a nonprofit research center that studies children at every stage of development. Their mission is to improve outcomes for children by providing research, data, and analysis to the people and institutions whose decisions and actions affect children. For the latest information on more than 100 key indicators of child and youth well-being, visit the Child Trends DataBank.
- *EU Kids Online* is a cross-national survey project on European children's experiences of the internet, focusing on uses, activities, risk, and safety. The project is coordinated by Prof. Sonia Livingstone and Dr. Leslie Haddon (London School of Economics). On this site, we can find in-depth details of how the project was developed: EU Kids Online II and EU Kids Online I. We can also access the Database of European Research, which includes recent and ongoing empirical projects regarding children and the Internet in Europe. It is also possible to download project reports and other output: papers, articles, abstracts, seminars, and presentations; newsletters; a special issue of Journal of Children and Media; and country posters that include an abstract of data from 25 countries participating in the project.
- *Childwatch International Research Network (CWI)* is a global network of institutions that collaborate in child research for the purpose of promoting ▶ child rights and improving children's well-being around the world. One of the themes in child research is Media and Technology, which includes very interesting resources such as: childwatch and other projects, research institutions and networks, IGO and NGO resources, and international standards.

Discussion

As we have seen, diverse authors and data sources are dedicated to researching children and adolescents' use of audiovisual media from a quality of life perspective. Initially, studies focused on the use of more classic media such as television, comics, and movies, but they have since moved on to explore new emerging technologies such as Internet, mobile phones, and social networks. Research conducted over the years has demonstrated how the use of technologies among children and young people has an important impact on their psychosocial development and well-being. Firstly, it has been shown that children and adolescents' use of audiovisual media has a positive impact on the development of interpersonal relationships, above all peer relationships. Authors such as Harris (1995) have pointed out that peer relationships play a very relevant role in childhood, but more particularly in adolescence, and that nowadays IT use has a very relevant role in developing young people's identity and the feeling of belonging to a peer group. Furthermore, it has also been observed that the use and consumption of certain audiovisual media may have a positive (or negative) impact on their well-being, depending on the audiovisual media children or young people say they use and the index or scale used to evaluate their well-being (Casas, Malo, Bertran, Montserrat & González, 2009). Research also demonstrates that children and adolescents are experts in the use of electronic media, meaning that most adults are left behind in terms of socialization.

In respect of this, Casas and his colleagues have maintained for some time that a certain generalized trend exists among adults not to accept their own inferior competence in relation to ICT use. Some adults insist socially that adolescents *are not yet competent* people, while they themselves *are already competent* and therefore have a lot to teach and little to learn from children (Casas, 2006).

Finally, it is worth highlighting that although there is a very diverse collection of information out there that may be of great use to researchers interested in this field, it is also important to be aware that, given the rapidly changing context in which we now live, research is constantly being updated and data therefore soon become out of date.

Cross-References

- Cell Phone Well-Being
- Child Rights
- Mass Media and Quality of Life
- Media Literacy
- Quality of Life
- Social Network
- Video
- Well-Being

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Children's Mass Media Use

▶ Children's IT Use

Children's New Information Communication Technology (NICT) Use

▶ Children's IT Use

Children's Participation and Adolescents' Participation

▶ Child Participation

Children's Personal Well-Being

▶ Personal Well-Being Index: Preschool Children
▶ Personal Well-Being Index: School Children

Children's Rights

▶ Child Rights
▶ Child Watch

Children's Subjective Well-Being

▶ Personal Well-Being Index: Preschool Children
▶ Personal Well-Being Index: School Children

Children's Victimization in School

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Definition

Olweus' work (e.g., 1993) on ▶ bullying brought worldwide attention to victimization of children in school. Bullying in school is defined by most researchers as intentional and repeated behaviors that harm another student. These behaviors could be verbal, social, or physical. Most definitions of bullying also focus on an imbalance of power between the bully and victim. Since Olweus' original work, there has been sustained public and research interest in bullying, its etiology and causes, the characteristics of bullies, victims, and the interventions designed to address this aggressive behavior. Many scholars maintain that bullying is only one type of school-based victimization. There are many other forms of victimization that do not fit the formal definition of bullying, such as physical fights between students with equal power, violent events that are not part of a repeated pattern, or victimization of students by school staff.

The term "▶ school violence" is commonly used to include a broad array of deliberate behaviors intended to physically and/or emotionally cause harm to students, staff, and property, on or near school grounds (Benbenishty & Astor, 2005). These behaviors vary in severity, frequency, and behavior type (e.g., physical, emotional, social, and sexual violence). Research shows that the etiology, social patterns

surrounding these disparate behaviors and their consequences for the victim are remarkably different. Thus, physical violence can range in severity from a slight push or a shove while standing in line in the cafeteria, to a severe beating, or even the use of weapons by a group of students. Social and verbal forms of school violence may include the spreading of malicious rumors, humiliation, and intentional exclusion, including those based on race, color, or ▶ sexual orientation. Sexual victimization may include behaviors such as receiving unwanted sexual comments, advances or sexually oriented materials, being the target of rumors of sexual content (e.g., regarding promiscuity, sexual orientation), being grabbed, kissed, or even sexually assaulted.

In recent years, electronic media (e.g., cell phones, smart phones, and the Internet) are being used as tools to victimize students. These behaviors are commonly referred to as "cyberbullying" (Smith, 2012), although in many cases, they do not meet all the definitional components of the term bullying. Even so, the use of social media is clearly extending the reach and impact of students who strive to threaten, humiliate, exclude, and harass peers. Electronic media is being used by some students to victimize a large number of different groups of students, repeatedly and anonymously.

There is far more discussion, both in the research literature and in public discourse, focusing on peer victimization and very little discussion of school staff victimizing students. There is emerging scientific evidence demonstrating that a significant number of students worldwide are being maltreated and victimized by school staff. For example, in some educational systems, a teacher is allowed to administer physical corporal punishment as a form of school discipline and punishment. According to a report by the American Civil Liberties Union and Human Rights Watch (Human Rights Watch, 2009), corporal punishment of students was allowed (as of August 2008) in 20 states in the USA. The investigators report that the total number of students who were subjected to corporal punishment in the 2006–2007 school year was 223, 190. Multiple forms of physical victimization were found, including "... hitting children with a belt, a ruler, a set of rulers taped together or a toy hammer; pinching, slapping or striking very young children in particular; grabbing children around the arm, the neck or elsewhere with enough force to bruise; throwing children to the floor; slamming a child into a wall; dragging children across floors... (Human Rights Watch, 2009, p. 3)."

Representative large-scale studies of students victimized by staff are rare. However, there is evidence that even when such behaviors are prohibited by law, students are physically, emotionally, and sexually victimized by staff (Khoury-Kassabri, 2009; Khoury-Kassabri, Astor, & Benbenishty, 2008). Studies indicate that victimization by staff is associated with cultural characteristics (e.g., to what extent corporal punishment is accepted), educator characteristics (e.g., level of education), and student characteristics (▶ disability, gender, age, involvement in school violence).

Description

Learning in a safe school environment is a major component of quality of life for students across the globe. Research findings consistently show that children are especially vulnerable to victimization because they have fewer resources and suffer more severe outcomes. This entry will focus on victimization in school including its definition, prevalence and trends over time, risk and protective factors, and prevention and intervention strategies.

Victimization of children can take place in many contexts. Overall, children's school-based victimization rates are less frequent and less severe compared with victimization in the community and home. Nevertheless, school-based victimization has important negative consequences for children that often last into adulthood. The prevention and reduction of victimization in schools could significantly improve the quality of life for children worldwide.

Prevalence

School violence has been studied using diverse definitions, methods, and instruments. These variations limit the ability to make generalizable statements about the prevalence of victimization in schools worldwide (Sharkey, Dowdy, Twyford, & Furlong, 2012).

International studies that were used to assess prevalence of children's victimization in schools indicate that the rates of victimization are not negligible and vary significantly across countries. For instance, the Health Behavior of School Children study (HBSC) included more than 200,000 children from 40 countries and found that 12.6 % reported being bullied. There were wide variations in victimization across countries. For example, involvement of boys in bullying combined (i.e., bullying others, being bullied, and being both a bully and a victim) ranged from 8.6 % in Sweden to 45.2 % in Lithuania (Craig et al., 2009). In the TIMSS study of 37 countries, the percentage of students who became victims of school violence in the last month ranged from more than 70 % in Hungary to less than 10 % in Denmark (Akiba, LeTendre, Baker, & Goesling, 2002).

Several important conclusions regarding prevalence can be drawn from the available literature. There are major differences in the prevalence of distinct types of school violence. Victimization to verbal violence such as curses and humiliation is quite common in schools, whereas physical victimization, especially victimization due to severe forms of physical violence or weapon used, is quite rare in most schools. For instance, in Israel in 2010–2011, about 39 % of junior high school students reported that during the last month, they were verbally victimized by another student, 12 % were pushed or shoved, 4 % were injured in a fight and needed medical attention, and 2 % were threatened with a knife. In the USA in 2009–2010, about 18 % of students (ages 12–18) report being victimized by theft in school, 8.7 % of ninth-grade students reported that they were threatened or injured with a weapon on school grounds in the previous 12 months, and there were 17 homicides (ages 5–18) of students on school grounds (Robers, Zhang, & Truman, 2012).

Prevalence rates are associated with age and gender. Victimization in schools tends to go down with age, except for weapon-related victimization. Males are victimized more than females. This trend is more extreme in physical violence and is less pronounced (and in some studies even reversed) with regard to social types of victimization, such as exclusion and spreading bad rumors.

Paradoxically, while in recent years, there is a growing public alarm regarding school violence and victimization, there are many indications that most types of school violence are becoming less prevalent. To illustrate, in the USA, between the years 1992 and 2010, there was a decrease in the rate of nonfatal victimization against students ages 12–18 from 150 per 1,000 to 32 per 1,000, the number of homicides of youth ages 5–18 at school was 34 in 1992, 14 in 1999, 32 in 2006, and 17 in 2009. In contrast, the percentage of students in grades 9–12 who reported being threatened or injured with a weapon has not decreased since 1993 (Robers et al., 2012). Reports on reduction in many types of victimization in school and stability in other types are also provided by national and international studies (e.g., Molcho et al., 2009; RAMA, 2012).

Consequences of Victimization at School

Methodologically, it is quite challenging to prove a direct causal relationship between victimization in school and outcomes. Nevertheless, there are many indications that school violence can have significant short- and long-term harmful effects on children's well-being. The literature suggests that in addition to physical ▶ pain and suffering, victims may also experience a range of somatic, psychological, and behavioral outcomes such as sleep disturbances, abdominal pain, headaches, low ▶ self-esteem, substance abuse, depression, loneliness, anxiety, suicidal ideation, poor academics, and low ▶ school attendance. Based on a systematic review and ▶ meta-analysis of longitudinal studies, Tfoti and Farrington (2011) report that the long-term probability of being depressed (up to 36 years after leaving school) was much higher for children who were bullied at school than for noninvolved students.

Depression was more prevalent among victims of bullying while in school even after controlling for many other risk factors.

Emerging findings show that victims of cyberbullying also experience negative outcomes. There are indications that victimization by electronic violence has a significant negative impact on youth. These may include relatively minor emotional reactions such as anger, frustration, and to more significant reactions such as depressive symptomatology, delinquent behavior, and substance use. Research findings show that sexual solicitation messages through social media are especially distressing to students. Youth who report being victims of Internet harassment were significantly more likely to concurrently report depressive symptomatology, interpersonal victimization, deficits in social skills, and harassing others online themselves (e.g., Schneider, O'Donnell, Stueve, & Coulter, 2012; Smith, 2012).

Findings on the consequences of student victimization by staff show that being victimized by school staff can cause greater physical and psychological harm, since students expect school staff to protect them and be fair. Among other outcomes of staff-initiated violence, investigators observed immediate pain and sometimes lasting physical injury and ongoing mental trauma. Sadness, ▶ anger, reduced motivation for academic success, and increased chances to dropping out of school were also noted (Human Rights Watch, 2009).

In recent years, two extreme (and highly publicized) potential outcomes of school victimization became a major source of concern – school shootings and suicides following incidences of bullying (Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2002). Findings indicate that many school shooters and students who have committed suicide were victimized in school (mostly verbally and socially, Vossekuil et al., 2002). In recent years, there is increasing awareness of the potential of suicide following bullying based on ▶ sexual orientation (Hong, Espelage, & Kral, 2012).

It is important to note, however, that there are many more students who have been similarly victimized and did not commit suicide or heinous crimes. Other variables such as an obsession with weapons, mental illness, prior warnings of lethal behavior, and knowledge of shooters' lethal plans by peer group members appear to be more linked with these lethal acts than bullying behaviors alone. Thus, it is prudent to conclude that victimization may increase the odds of such extreme reactions within a rare and already potentially lethal subgroup of students, but the chances of such outcomes due to bullying behaviors alone are very small. Responses to threats to inflict severe harm both to self and to others should include therefore complete threat assessment protocols, suicide prevention methods, and mental health assessments, and not focus on school violence issues alone.

Even in the absence of lethal behaviors, school violence and bullying could severely impact the quality of life for victimized students. Findings from multiple studies suggest that the short- and long-term effects of victimization may be buffered or exacerbated by school climate-related factors. Even if a student has been victimized, the way teachers or schools respond to a violent event could change how the victim heals. Thus, for instance, the quality of ▶ social support provided by peers, teachers, and parents to students victimized in school may alter the subjective experiences of the victim and prevent long-term negative effects (Demaray, Malecki, Jenkins, & Westermann, 2012).

Risk and Protective Factors

Identifying risk and protective factors is critical for the development of interventions. The theoretical and empirical literature indicates that school violence and victimization is caused and influenced by a complex interaction of factors on multiple levels. For instance, Benbenishty and Astor (2005) present a socio-ecological model of "school violence in context" that focuses on the interplay between characteristics of individual students and the nested contexts in which they are embedded – school, family, neighborhood/community, and culture. Swearer and colleagues (2012) use a similar socio-ecological conceptualization and provide examples of risk and protective factors that relate to individual-level

characteristics (e.g., suicidal ideation), peer influences (e.g., potentially encouraging aggressive behaviors and buffering the effects of victimization), school variables (e.g., staff support, school connectedness), family environment (e.g., risky family environment and positive parenting), and ▶ community and ▶ neighborhood (e.g., ▶ poverty, crime, and safety). International studies provide additional evidence on the effects of country-level differences. For instance, national systems of education that produce greater differential achievements tend to report more violence (Akiba et al., 2002).

Risk and protective factors are interacting and influence each other across contexts. For instance, family, individual, and school factors interact to create an environment that either supports or discourages victimization in school. In turn, how the school responds can impact the short- and long-term outcomes of victimization at school. The school's response has a dual effect of potentially reducing the incidence and prevalence rates of victimization and buffers the socio-emotional consequences of victimization by creating a caring community.

Furthermore, the many aspects of children's lives are interconnected and mutually influential. Victimization may not affect only one dimension of the child's life, e.g., internalizing behaviors, but also other behaviors and perceptions, such as substance use, school connectedness, academic involvement and achievement, and overall sense of satisfaction and well-being.

These conceptual frameworks have direct relevance to practice and intervention as they help identify risk and protective factors associated with the individual student, family, school, peer group, and community. Often, the risk and protective factors can be targeted for interventions that bolster the schools ability to address issues of school safety. Clearly, in this ecological model, schools play an active role in preventing, mediating, and responding to violence.

Interventions

School violence is a global phenomenon and numerous countries are addressing this challenge. In the United States, public interest was heightened after a series of highly publicized fatal school shootings in the late 1990s (most notably, Columbine High School). These shootings resulted in important national, state, and local changes in school safety legislation, policy, intervention, large-scale funding, and research (Osher & Dwyer, 2005). Additionally, the shootings induced several zero-tolerance policies mandating expulsion for possession of weapons, and they provoked a host of draconian interventions such as security guards, metal detectors, and video surveillance cameras. Research suggests that such harsh measures are less effective, discriminate against students of color, and often create the perception that school is "prisonlike" (Reynolds, Skiba, Sandra, et al., 2008). Misuse of school security measures such as locker or strip searches may have created emotional backlash in students and victimized them in a different form (Hyman & Perone, 1998).

There are a rather large number of evidence-based programs designed to address multiple aspects of victimization and violence in schools. Several organizations review and present these programs (e.g., the National Center for Mental Health Promotion and Youth Violence Prevention, http://sshs.promoteprevent.org/publications-sshs/ebi-factsheets, Hamilton Fish Institute, http://www.hamfish.org, the Centre for Public Health at Liverpool John Moores University, a collaboration with the World Health Organization, http://www.preventviolence.info/evidence_base_complete.aspx).

A systematic review and meta-analysis of 44 studies (Farrington & Ttofi, 2009) concluded that "overall, school-based anti-bullying programs are effective in reducing bullying and victimization (being bullied). On average, bullying decreased by 20 %–23 % and victimization decreased by 17 %–20 % (p. 7)."

Astor and colleagues (Astor, Benbenishty, Marachi, & Pitner, 2009) reviewed successful school-wide intervention programs and have identified the following core implementation characteristics:

They raise the awareness and responsibility of students, teachers, staff, and parents regarding

the types of violence in their schools (e.g., sexual harassment, fighting, weapon use).

They create clear guidelines and rules for the entire school.

They target the various social systems in the school and clearly communicate to the entire school community what procedures should be followed before, during, and after violent events.

They focus on getting the school staff, students, and parents involved in the program.

The interventions often fit easily into the normal flow and mission of the school setting.

They utilize faculty, staff, and parents in the school setting to plan, implement, and sustain the program.

They increase monitoring and supervision in nonclassroom areas.

They are culturally sensitive, culturally competent, and immersed within the community/culture of the students.

Formal structured programs are not the only means schools could use to prevent and reduce school violence. There is ample evidence to suggest that schools can create a positive school climate which includes ▶ norms, ▶ values, expectations, and behaviors that reduce victimization and promote social and emotional well-being (Cohen, Mccabe, Michelli, & Pickeral, 2009). A well-organized, caring, and mission-oriented school leadership could create school environments that protect children from victimization, even when the environment outside of the school is violent (Astor, Benbenishty, & Estrada, 2009).

Cross-References

- ▶ At-Risk Children
- ▶ Child Maltreatment: Neglect
- ▶ Child Maltreatment: Physical Abuse
- ▶ Child Maltreatment: Psychological Maltreatment
- ▶ Child Maltreatment: Sexual Abuse
- ▶ Mass Media and Quality of Life
- ▶ School Climate
- ▶ Sexual Orientation and Mental Health
- ▶ Youth Violence

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Chile, Quality of Life

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Definition

Chile and Quality of Life

Chile is in South America. Due to its location, topology, and morphology, Chile presents important geographical, physical, and human diversity.

Politically, the country is divided into 15 regions. The state is strongly centralized. Santiago, the capital, belongs to the Metropolitan Region (Region Metropolitana), in the middle of the country. Official preliminary results of the census of 2012(INE, 2012) estimate the population to 16.572.475, from which 6.6 million are residing in Santiago Metropolitan Region (40.3 % of Chile's total population). The estimated per capita gross national income is 16.330 USD (purchasing power parity (World Bank, 2011)).

Chile is a land of migration with strongly spatial, ethnics, and socioeconomic segregations, where populations of European origin tend to occupy the higher strata in the society.

Chile was colonized by Spain in the middle of the fifteenth century and obtained its independence in 1810. In the nineteenth century, promoted by the state, communities of Germans, Croats, Frenchs, Italians, and British arrived. In the twentieth century, Asian and European communities migrated as a consequence of the Second World War. In the last decades, the relative economic growth seduced immigrant populations from Argentina, Peru, Ecuador, and Paraguay. For instance, in Chile lives the larger Palestinian community in exile.

Chile's recent history is strongly marked by the military coup in 1973 and the socioeconomic reforms promoted by the dictatorship, transforming the country in a privatization paradigm in the fields of education, health, and retirement systems.

Concern about quality of life as a topic appears in 2000, focused by public managers and decision makers and related to inequalities. Basically it has been developed in three main fields: health, work, and territory.

Description

Quality of Life and Health

The survey on quality of life and health has been conducted in 2000 and in 2006 (MINSAL, 2000; 2006). This survey has three modules: housing and household, respondent characterization, and children.

It is a probabilistic survey, with a sampling error of 2.5 %. It is representative at national and regional levels, as well as for urban and rural areas. In 2006, the sampling size was 10,207, 6210 of 15 years of age and elders and 4,997 of younger than 15 years of age.

In this survey, the definition of the quality of life of the World Health Organization is the one adopted: "The perception one individual has of his/her place in the existence, in the context of the culture and the system of values in which he/she lives and in relation to his/her objectives, his/her expectations, norms, concerns. It deals with a very large concept, which is influenced in a complex mode by the physical health of the subject, psychological condition, level of independence, social relations, as well as his/her relationship with the essential elements of his/her environment" (MINSAL, 2008).

The main objective of the survey is "to know the perception of the Chileans related to their health condition and the presence of various factors determining health, which in return affect the quality of life of the population" (MINSAL, 2008). The purpose of the survey is the production of indicators for the design, the development and the evaluation of public policies, and interventions in health system.

The results in terms of satisfaction with the different topics treated by the second Quality of Life and Health Survey of 2006 are synthesized in Table 1.

It is important to note the systematic and consistent differences observed by sex in the responses as shown in Table 2.

Finally, the survey includes in the module of the respondent the SF-12 scale, to measure the quality of life related to health, for international comparisons.

Related to this survey, a national survey on quality of life in old age in 2007 and 2010 has been done and focused on people of 60 years of age and more (SENAMA, 2011).

Quality of Life and Territory

The link between quality of life and territory is measured in Chile through the National Survey of Urban Quality of Life Perception of 2007 (MINVU-INE, 2008). It is a national survey, probabilistic, applied in 103 urban areas (comunas), with a sampling error of 10 %. In the survey, the quality of life is defined as the subjective evaluation (satisfaction) of access and valuation of the urban infrastructure as a measure of well-being. The concept of quality of life is focused through the measurement in five fields: urban environment evaluation, uses of infrastructure and services, location and transports, the citizenship, and the expectations. The survey has been launched as an initiative of the Ministry of Housing and Urbanism in collaboration with the National Institute of Statistics.

Quality of Life, Employment, Work, and Health

In 2009–2010, the first national survey on employment, work, health, and quality of life was developed in Chile and focused on inequity of various types, such as income, occupational status, educational level, and gender and socioeconomic status (Gobierno de Chile, 2011). It is an interministerial initiative, where the Ministry of Health, the Work Office (Ministry of Work), and the Labour Health Institute were called. Its main focus is to simultaneously evaluate the different dimensions in respect to employment conditions, work and quality of life, and health of the Chilean workers.

The purpose of the survey is to formulate public policies in the fields of work, health, and

Chile, Quality of Life, Table 1 Vital satisfaction with the different aspects of life

How do you feel with. . .?	Very bad	Bad	Less than regular	Regular
The privacy you have where you live	1,7	2,7	3,0	11,7
CI 95 %	(1,3–2,2)	(2,2–3,3)	(2,4–3,7)	(10,6–12,9)
Amount of money	3,2	10,1	8,2	28,0
CI 95 %	(2,7–3,8)	(9,2–11,1)	(7,3–,1)	(26,6–29,5)
Physical condition	1,4	5,6	5,3	19,6
CI 95 %	(1,0–1,8)	(5,0–6,4)	(4,6–6,1)	(18,4–20,9)
Mental or emotional well-being	1,0	3,4	3,0	13,8
CI 95 %	(0,8–1,4)	(2,8–4,1)	(2,5–3,6)	(12,7–14,9)
Partner relationship	1,5	1,7	1,0	6,9
CI 95 %	(1,0–2,2)	(1,2–2,2)	(0,7–1,4)	(6,0–7,9)
Amount of fun	2,2	4,6	5,0	16,8
CI 95 %	(1,7–2,8)	(4,0–5,3)	(4,4–5,8)	(15,6–18,1)
Family life	0,2	1,1	1,1	6,6
CI 95 %	(0,1–1,1)	(0,8–1,5)	(0,7–1,5)	(5,8–7,5)
Work	0,4	1,8	1,9	9,6
CI 95 %	(0,2–0,8)	(1,3–2,5)	(1,4–2,7)	(8,3–11,0)
Sexual life	1,9	2,8	1,9	8,7
CI 95 %	(1,4–2,6)	(2,2–3,6)	(1,5–2,5)	(7,7–9,8)
Life in general	0,4	1,5	1,1	8,9
CI 95 %	(0,3–0,7)	(1,1–2,0)	(0,9–1,5)	(8,0–9,8)
In general, your health is	0,8	3,5	3,2	19,0
CI 95 %	(0,6–1,1)	(3,0–4,2)	(2,7–3,8)	(17,8–20,3)

How do you feel with. . .?	More than regular	Good	Very good	Don't know
The privacy you have where you live	12,2	48,1	20,7	0,0
CI 95 %	(11,1–13,3)	(46,4–49,8)	(19,4–22,0)	
Amount of money	21,1	24,2	5,0	0,2
CI 95 %	(19,6–22,5)	(22,8–25,7)	(4,3–5,9)	(0,1–0,4)
Physical condition	16,7	41,6	9,8	0,0
CI 95 %	(15,4–18,0)	(39,9–43,2)	(8,8–10,9)	(0,0–0,2)
Mental or emotional well-being	14,1	52,2	12,4	0,0
CI 95 %	(12,9–15,4)	(50,6–53,9)	(11,3–13,6)	(0,0–0,1)
Partner relationship	7,7	55,3	25,7	0,2
CI 95 %	(6,7–8,9)	(53,4–57,3)	(24,0–27,4)	(0,1–0,4)
Amount of fun	15,9	41,9	13,0	0,4
CI 95 %	(14,7–17,1)	(40,3–43,6)	(11,9–14,3)	(0,3–0,7)
Family life	8,4	57,6	25,1	0,1
CI 95 %	(7,5–9,4)	(55,9–59,2)	(23,6–26,5)	(0,0–0,2)
Work	15,4	54,1	15,6	1,2
CI 95 %	(13,6–17,4)	(51,6–56,5)	(13,8–17,5)	(0,8–1,9)
Sexual life	11,9	53,4	18,4	1,0
CI 95 %	(10,6–13,2)	(51,5–,4)	(16,9–19,9)	(0,7–1,5)
Life in general	14,3	60,0	13,6	0,1
CI 95 %	(13,1–15,5)	(58,4–61,6)	(12,5–14,8)	(0,1–0,3)
In general, your health is	17,2	45,5	10,7	0,1
CI 95 %	(16,0–18,6)	(43,8–47,1)	(9,7–11,8)	(0,0–0,3)

Levels from 1 to 7, where 1 is "it feels very bad" and 7 "it feels very good"
Source: Second Survey on Quality of Life and Health, Question 35, 2006

Chile, Quality of Life, Table 2 Vital satisfaction with the different aspects of life by sex

	Male				Female			
			Mean CI 95 %				Mean CI 95 %	
How do you feel with. . .?	Median	Mean	Lo	Sup	Median	Mean	Lo	Sup
Privacy	6,0	5,6	5,5	5,7	6,0	5,5	5,5	5,6
Amount of money	5,0	4,6	4,5	4,6	4,0	4,4	4,3	4,5
Physical condition	6,0	5,2	5,2	5,3	5,0	4,9	4,9	5,0
Mental or emotional well-being	6,0	5,5	5,5	5,6	6,0	5,3	5,3	5,4
Partner relationship	6,0	5,9	5,9	6,0	6,0	5,8	5,7	5,9
Amount of fun	6,0	5,3	5,3	5,4	6,0	5,1	5,0	5,1
Family life	6,0	6,0	5,9	6,0	6,0	5,9	5,9	6,0
Work	6,0	5,6	5,6	5,7	6,0	5,7	5,6	5,8
Sexual life	6,0	5,8	5,7	5,8	6,0	5,5	5,4	5,6
Life in general	6,0	5,7	5,7	5,8	6,0	5,7	5,6	5,7
Health	6,0	5,4	5,3	5,5	6,0	5,2	5,1	5,2

Levels from 1 to 7, where 1 is "it feels very bad" and 7 "it feels very good"
Source: Second Survey on Quality of Life and Health, Question 35, 2006

social protection in order to reduce inequalities. The conceptual framework is the world report of the Commission on Social Health Determinants, in the field of conditions of employment and work and inequities in health (EMCONET) 2005–2009, adopting a multivariate approach of the quality of life (Gobierno de Chile, 2011, p. 14).

The survey is probabilistic, representative at the national and regional levels, for urban and rural areas. The target population is the resident population older than 15 years of age, who had a remunerated work during the 12 months preceding the registration of the households (secondary sampling frame). The sampling size is 9,503 respondents, 7,846 in urban areas and 1,657 in rural areas.

The survey is composed of six modules:

1. Socioeconomic level: education, purchasing power of the household, occupation, position in the process of work, and employment relationship
2. Quality of life and health: Measurement of satisfaction and health condition perception through physical, material, social (nets, inclusion), and emotional well-being
3. Conditions of work
4. Psychosocial factors
5. Conditions of employment
6. State and society

The results of this survey of 2010 confirm the results of the National Survey on Quality of Life and Health of 2006, where females expressed lower satisfaction than males with different aspects of quality of life.

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China, Personal Well-Being Index

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Synonyms

Happiness in China; Life satisfaction in China; Well-being; Well-being, subjective

Definition

Since 2001, when the Personal Well-being Index (PWI) first originated in Australia and the International Well-being Group (Group) was conceived (Cummins and Lau, 2003), researchers from China have played an instrumental role in the development of this instrument. Relevant findings important for informing subjective well-being measurements of Chinese and East Asians have been produced. This entry provides an overview of this historical development undertaken in over 20 cities and rural/remote areas across China, with relevant findings published up till July 2012. Major findings and implications related to the PWI, SWB measurement, and proposed suggestions for future development in these areas are discussed.

Description

Historical Development of the Personal Well-being Index (PWI) in China.

Hong Kong (Special Administrative Region (SAR))

During the formative years of the International Well-being Group, Hong Kong played a pivotal role as the first region outside Australia to become a member, with the current author (Dr. Anna Lau) as China's Regional Coordinator and Hong Kong's Principal (Primary) Researcher. Dr. Lau was working as an academic at the Hong Kong Polytechnic University at the time.

In joint collaboration also with the Australian Centre on QOL (Professor Robert Cummins, Director), the aim was to facilitate the work of developing the PWI as a cross-cultural instrument, with emphasized relevance for Chinese and East Asian communities. Within this endeavor, the following research outcomes eventuated:

1. The first Chinese-translated PWI (Adult) was produced (*Cantonese*) and validated for use in Hong Kong and other Chinese communities.
2. Other parallel versions of the PWI were also created, translated into Chinese (*Cantonese*), and validated to enable group comparisons on SWB and for norm-referencing with Adult populations. They include versions for people with Cognitive Impairment or Intellectual Disability (PWI-ID), Children of School Age (PWI-SC), and Pre-school Ages (PWI-PS). The scale items in these parallel versions are very similar to those in the "Adult." However, some main differences are in the simplified domain-item wordings and pre-testing protocol for determining whether the respondent meets the comprehension and other response demands of the scale.

To help facilitate the use of the index, test manuals on all PWI versions in both English and Chinese languages were created. The current versions of these scales and manuals are available as International Well-being Group (2006) and Cummins and Lau (2005a-f).

3. The first normative SWB (PWI) datasets on Chinese populations of adult-age, children, and people with cognitive impairment and ID were established in Hong Kong. Informative insight into culturally specific SWB measurement issues with Chinese and also East Asian populations was also established.

At the operational level, to help facilitate, promote, and provide support to other researchers and users for the ongoing development and use of the PWI within Chinese and East Asian communities, Hong Kong functions as a subsidiary resource base (formerly based at the Polytechnic University) to the Australian Centre on QOL, where the global Group endeavor is housed. This involves an established website, networking, advising, and also information sharing with researchers, the general Hong Kong community (e.g., service agencies and organizations, frontline service providers/practitioners), and government sectors. Culturally specific findings are provided to the local media (e.g., Ming Pao, 2007; South China Morning Post (SCMP), 2006) and disseminated in numerous local/regional/overseas meetings and conferences, and workshops (e.g., Lau 2006; Lau & Cummins, 2005) are also conducted.

The Mainland and Macau (SARS)

Following 2005, the Group expanded, with researchers from the Mainland and Macau (as another China Special Administrative Region) joining as Primary or Project Researchers (see ACQOL website for list: http://www.deakin.edu.au/research/acqol/iwbg/members/). This gained momentum within the following 2 years, with a myriad of PWI-related research surging across China. Some major developments include the following:

2005: Shandong (eastern coastal province) became involved as the first region from the Mainland, with Professor Zhanjun Xing as Primary Researcher who is now based at Shandong University. He conducted the first Mandarin translation and validation of the PWI in Jinan city (Huang & Xing, 2005), which has been instrumental in facilitating further research in China. Professor Xing has also gathered SWB population data in numerous other capital cities on the Mainland with the index (Xing, 2008, see elsewhere in Encyclopaedia: Xing, 2013).

Professor Dave Webb, from the University of Western Australia, also joined as a Primary Researcher for the Tibetan Prefecture of Yushu. Professor Webb produced a validated version of the PWI in Tibetan-translated language. His investigations with ethnic Tibetan nomads have enabled valuable insight into SWB with the PWI of people who live in an unusually harsh environment in the highlands of Mainland China, where more conventional research methods cannot be easily employed (Webb, 2009, see elsewhere in Encyclopaedia: Webb, 2013).

2006: Rural Hunan (southeast central province) has been sampled by Dr. Gareth Davey as Project Researcher for enabling important understanding of the index and SWB in rural areas (Davey, Chen, & Lau, 2009). These are areas often overlooked, even though more than half of China's population resides here with lifestyle and living circumstances different from urban cities. Dr. Davey has also gathered PWI data on an urban population from Zhuhai, a city in Guangdong Province (Southern China) which has a thriving economy (Chen & Davey, 2009).

Macau, another China Special Administrative Region, joined the Group with Dr. Ricardo Rato and Professor Richard Whitfield from the University of St. Joseph (formerly Macau Inter-University Institute) as Primary Researchers. In joint collaboration with another colleague from the same university (Dr. Michael Lio) and a local partner industry, they implemented a series of regular quarterly surveys which used the PWI to monitor the SWB of Macau's Chinese population over a 3-year period (2007–2009). Their work has provided a valuable longitudinal perspective of informing SWB and the PWI (Rato & Davey, 2012; Rato, Lio, & Whitfield, 2007–2009).

2007: Other locations on the Mainland have been covered by a number of excellent studies conducted by a Monash University-based research team in Australia. This is led by Dr. Ingrid Nielsen (Primary Researcher of the Group for Beijing Municipality) and Professor

Smyth, who with their colleagues, has conducted extensive research with the PWI "literally" all over China (see Table 1 later). Their studied samples are diverse, comprising general populations and selected groups from both urban and remote areas (Nielsen, Partiski, & Smyth, 2010; Nielsen, Smyth, & Zhai, 2010; Smyth, Nielsen, & Zhai, 2010). They have also produced other translations of the PWI in other Chinese forms and dialects (e.g., Ugher – an ancient Arabic dialect), which are relevant for use with these groups.

As a result of the research outlined, collectively, the following noteworthy outcomes have also been produced:

Other Chinese-translated versions of the PWI in Mandarin (*Putonghua*), required for use in other countries (e.g., Taiwan – Yang, 2006; Singapore – Lau and Ow-Yeung, 2008), were subsequently also developed. Cumulative normative and comparative datasets concerning the SWB of Chinese adult populations have been established over 20 cities and rural/remote areas. In Hong Kong, such datasets have also been gathered on special populations concerning children and health-related groups (e.g., ID, cognitive impairment).

Some studies have employed cross-cultural comparative or qualitative methods (e.g., Davey et al., 2009; Lau, Cummins, & McPherson, 2005) and long-term, cross-sectional surveys (e.g., Rato et al., 2007–2009). Other studies have timed data collection to coincide with major events, such as the 2008 Olympic games held in Beijing (Nielsen, Paritski, & Smyth, 2010) and the life-threatening SARS pandemic which occurred in Hong Kong in 2003 (Lau et al., 2008).

In summary, the increasingly diverse mix of studied samples, environmental conditions, and employed complementary research approaches have helped achieve a more informed understanding of the performance of the PWI for advising its ongoing development as a cross-cultural SWB measure. They have also enabled valuable insights into the SWB of Chinese populations and helped inform general relevant measurement issues.

Major Findings Related to the PWI and SWB Measurement in China

Numerous studies concerning the use of the PWI in China have been published since 2005. These are summarized in Table 1, many of which have also have been described in an informative review by Davey and Rato (2012). These findings and the relevant implications they have for the PWI and SWB measurement of Chinese and East Asians can be summarized as follows:

1. ***"Gold standard" normative group means*** are now established as ranging between 60 and 70, with the mean score as 65, on a standard 0–100-point scale. These are approximately 10 points lower than the 70–80 point range identified for Western populations (see, e.g., Cummins, Lau, & Davern, 2009). This difference is predominantly due to cultural response bias which is explained later.

   As summarized in Table 1, except for two studies, all reported PWI values fall within the 60–70 range despite varied research designs, samples, locations, and timing. The mean score difference across the studies vary just around four points. The two studies reporting group mean values just slightly outside this range may be explained by methodological issues. These are low sample numbers in Webb's (2009) investigation. In Xing's (2013) study, numerous additional scales were simultaneously administered which could have given rise to issues of respondent fatigue and conceptualization complexity. It is also possible that the test sequencing of the different scales could have also produced a test-item order effect.

   Compelling evidence for the stability of population mean scores comes from the Macau population surveys. These show only a 3.7 point difference across their eight surveys (Rato et al., 2009). Further evidence of the resilience of the identified mean satisfaction scores is also demonstrated in other PWI investigations conducted with people living in challenging circumstances such as on the Tibetan Plateau (Webb, 2009) or rural areas (Davey et al., 2009), among off-farm migrant workers in the city and also in situations when

China, Personal Well-Being Index, Table 1 PWI Satisfaction Scores of General Adult Population Studies conducted in China (2002–2011)

Average mean satisfaction	The mainland		Special administrative region	
	Cities	Rural/Remote	Hong Kong	Macau
	Shandong[a]; Zhuhai[b]; Beijing[c]; Changle, Fuzhou, Quangzhou Xiamen[d] Chengdu, Dalian, Fushan, Fuxin, Fuzhou, Wuhan[e]; Beijing, Xian, Shenyang, Guangzhou, Kunming[f]	Hunan[g]; Tibetan Plateau[h]	HK1[i]; HK2[j]; HK3[k]	8 surveys[l]
PWI score	63.1 (15.2)	67.4 (21.4)	67.0 (15.5)	64.4 (15.4-17.8)
PWI domain				
Standard	58.5 (24.2)	65.5 (21.4)	66.8 (14.5)	63.5 (15.4)
Health	67.1 (23.2)	69.8 (25.0)	68.2 (16.3)	67.6 (17.5)
Achieve	59.4 (24.0)	61.2 (22.5)	63.3 (16.9)	59.4 (17.8)
Relationship	72.0 (20.6)	73.6 (20.1)	73.0 (14.5)	69.4 (15.8)
Safety	67.6 (22.8)	71.4 (20.4)	70.0 (16.9)	66.2 (16.4)
Community	63.7 (23.5)	42.8 (20.0)	63.7 (17.2)	62.9 (17.5)
Security	55.3 (23.2)	66.1 (19.5)	64.5 (17.1)	61.6 (17.7)
Range scores				
PWI score	58.3(29.9)–64.6 (27.3)	64.2 (6.4)–70.6 (23.8)	65.9 (16.9)–67.1 (13.5)	63.0 (15.4)–66.7 (17.8)
PWI domain				(SD not reported for last four surveys. But all domain SDs reported on Surveys 1–4 are<19.0)
Standard	47.0 (29.4)–64.6 (27.3)	64.2 (17.8)–66.8 (25.1)	65.1 (17.5)–69.7 (14.3)	61.5–67.9
Health	55.1 (26.3)–74.5 (24.9)	69.6 (24.0)–70.0 (26.0)	66.6 (19.2)–69.4 (16.5)	65.6–69.8
Achieve	53.2 (30.0)–64.7 (20.6)	57.9 (19.8)–64.5 (25.3)	61.4 (18.7)–65.4 (14.8)	55.9–64.1
Relationship	67.1 (24.7)–77.4 (21.1)	69.9 (15.8)–77.3 (24.4)	72.0 (14.4)–74.6 (14.4)	66.7–71.2
Safety	53.9 (26.1)–78.5 (22.0)	69.9 (18.2)–73.0 (22.6)	67.8 (18.2)–72.9 (15.1)	64.1–69.6
Community	56.8 (28.2)–74.0 (23.1)	57.8 (19.4)–70.7 (20.6)	57.5 (18.9)–69.8 (17.8)	59.7 (only in 1 survey)–66.1
Security	54.0 (26.6)–67.1 (13.6)	60.4 (16.6)–71.8 (22.5)	59.5 (18.9)–67.9 (15.7)	59.4–65.0

[a]Huang and Xing (2005)
[b]Chen and Davey (2009)
[c]Nielsen, Paritski, and Smyth (2009)
[d]Nielsen, Smyth, and Zhai (2010)
[e]Smyth, Nielsen, and Zhai (2010)
[f]Xing (2008, 2012)
[g]Davey, Chen, and Lau (2009)
[h]Webb (2009, 2012)
[i]Lau, Cummins, and McPherson (2005)
[j]Lau, Chi, Cummins, Lee, Chou and Chung (2008)
[k]Lau, Davey, and Cummins (In preparation)
[l]Rato, Lio and Whitfield (2007–2009); Rato and Davey (2012)

exposed to a major life-threatening event (Lau et al., 2008). Such SWB resilience is also consistent with the pattern reported in the broader literature concerning other disadvantaged or vulnerable groups (e.g., Biswas-Diener & Diener, 2001, 2006).

2. These results are consistent with predictions based on the ***Theory of Subjective Well-Being Homeostasis*** (Cummins, Lau, & Davern, 2009; see elsewhere in Encyclopaedia: Cummins, 2013), which underpins data interpretation of the PWI. Essentially, this theory posits that SWB is maintained as a positive sense of well-being through a combination of genetically determined "set points" and a neuropsychological regulatory mechanism. This positive state is a reflection of a deep and stable positive mood known as "Homeostatically Protected Mood" (HP Mood) which is affect dominant and gives rise to a generalized and rather abstract view of the self. These factors act to defend this state for each person against strong personal experiences which threaten to move it outside the normative range or help restore it to its previous normative level, should the experience be exceedingly strong to cause a significant drop in well-being.
3. The influence of ***cultural response bias*** is proposed as a major contributing factor for the different SWB normative values identified between Chinese and Western populations in systematic investigations (e.g., Lai, Cummins, & Lau, 2012; Lau et al., 2005). Within Chinese but also East Asian cultures, this bias discourages strong appraisals using the extremes of self-evaluative scales. Further qualitative investigations by Lau and Cummins (in preparation) have identified the influence of common philosophical beliefs, which are deeply rooted within Asian Chinese culture (e.g., Confucianism, Taoism), to be a dominant factor explaining this bias. These include, for example, the valued principle of modesty and the different personal interpretations of what the extreme response rating scores represent. These findings have important implications for the interpretation of cross-cultural SWB comparisons.
4. The PWI has consistently demonstrated ***acceptable psychometric properties*** within all the studies reviewed. These findings have been mainly based on the original PWI version, which comprised seven life domains. An exception is with investigations conducted in Hong Kong and Macau, where the additional eighth domain of "spirituality/religion" has been used. Results from other countries have not found the addition of this new domain to have changed the scale's overall psychometric properties in any substantial way (e.g., Tiliouine, 2009; Wills, 2009). These collective domains represent as the minimum sufficient set which make up the first-level deconstruction of general life satisfaction (GLS; "How satisfied are you with your life as a whole?"). Hence, they have been determinedly constructed to be broad to allow for the closest approximate measurement of the generalized and abstract SWB state.

Original Seven-Item PWI (Adult Version)

The PWI has demonstrated good utility, validity, reliability, sensitivity, and discriminatory performances across the different China studies. These findings also concur with results from other countries' International Well-being Group researchers (see elsewhere in Encyclopaedia: PWI). A summary is as follows:

Reliability

All studies have reported Cronbach's alpha for the PWI to be around 0.80 and ranging from 0.72 to 0.85. This indicates good internal consistency and is reflected also by the item-total correlations which are generally around 0.50 or higher. This meets the 0.30 minimum criterion value for considered satisfactory performance. The test-retest reliability has been investigated in Hong Kong by Lau, Davey & Cummins (in preparation). Using a representative general adult sample, the mean and all domain satisfaction values remained unchanged over a 2-week period. The intraclass correlation coefficients (PWI 0.84, Domains 0.68–0.85) are also acceptable. Longitudinal reliability is reflected in the lack of significant difference in the PWI between surveys in Macau conducted over a 3-year period (Rato & Davey, 2012).

Validity

In terms of the PWI scale structure, all domains have consistently met the assumption criteria for factor analysis. All reported Kaiser-Meyer-Olkin values were higher than the 0.60 minimum required, and all Bartlett's Test of Sphericity values showed 0.05 statistical significance. The majority of inter-domain correlation values were also greater than the minimum recommended 0.30. Principal Component Analyses (including rotation) have consistently found the domains to form a stable single factor and to fulfill the adopted criterion eigenvalue (>1.0). In terms of the total PWI variance accounted for by the domains, this is in the range of 40–50 %, with the exception of two studies reporting values in the 10 % range (Chen & Davey, 2009; Rato & Davey, 2012). The reason for these lower values requires further investigation. All the domains also commonly load adequately on the factor at around 0.50–0.80.

In terms of accounting for GLS variance, multiple regression analyses have found the domains to collectively account for between 33 % and 56 % of the variance, with the majority falling within the 40 % range. Of this, about 30–42 % has been reported to be shared variance and approximately 10–17 % as representing unique variance. The larger proportion of shared variance is due to HP Mood (Davern, Cummins, & Stokes, 2007). All seven domains have been found to make a unique contribution, but some more consistently than others. The most consistent domains are *standard of living* (β 0.24–0.57) and *achieving in life* (β 0.24–0.57). These are followed by *future security*, *personal health*, and *personal relationships* (mostly at $\beta > 0.10$) in some studies. The domains least commonly reported to be unique contributors are *personal safety* and, particularly, *community connectedness*.

Sensitivity

The domain satisfaction scores have demonstrated sensitivity in being able to tap personal well-being states which are reflective of the culturally relevant issues, life circumstances, and events that impact on well-being. For example, when compared to the Special Administrative Regions (SARS), the domain scores from the Mainland cities tend to generally be lower and are more inconsistently reported. Although satisfaction scores from the rural/remote areas are also inconsistent, there are just two studies and one has a small sample size (Webb, 2009, 2013). The Mainland results probably reflect the uneven levels of economic development in China which, as a country, has experienced remarkable robust economic growth these past two decades. This development and associated changes have been rapid but uneven, particularly on the Mainland, and are accompanied by conflicting outcomes which are positive (e.g., increased wealth, better living standard) and negative (income disparity, environmental degradation) (e.g., see Smyth et al., 2010) that strongly impact on personal well-being. This is different from Macau and particularly Hong Kong, which are considered more generally affluent with more stable and established infrastructures inherited from their previous Portuguese and British sovereignty. As expected, a strengthening economy would commonly be accompanied by improved societal infrastructure that can better address, for example, health and safety concerns. However, rapid growth may also attract challenges such as disruptive changes, future uncertainties and insecurities, and weakened community connectedness. This pattern is revealed in the consistent ranked satisfaction scores of domains which are generally highest in *personal relationships*, *safety*, and *health* but lowest in *future security*, *achieving in life*, and *community connectedness*. However, satisfaction levels with *standard of living* are most inconsistent but commonly fall between mid and low range.

Current 8-Item PWI (Adult Version Including Spirituality-Religion Domain)

The effect of the new spirituality-religion domain to the PWI has been investigated in Hong Kong with adults and adolescents. Some of these findings have been reported but the fuller details are, at present, in writing process for publishing (e.g., Lai, Cummins, & Lau, in preparation; Lau, Wong, & Idy, 2009). Macau has also trialed this item in their adult population surveys but except

for a brief mention in their first survey report (Rato et al., 2007), the relevant findings have not been published.

The findings from Hong Kong are inconsistent. For example, the domain does not appear to make a unique contribution to GLS among older adults, even though within the Chinese culture, this age group is known to have strong spiritual or religious beliefs (Lau et al., 2009). In contrast, another study conducted with younger adults (Lai et al., in preparation) found this domain to make a weak 1 % unique contribution. Overall, however, the psychometric performance of the PWI was consistently found to be relatively unchanged by the addition of this new domain.

PWI for Special Populations (PWI-Children, PWI-ID)

According to the author's knowledge, within China at this stage, these parallel versions have been systematically investigated with approximately 2,500 children/adolescents (aged 4–17) and over 800 people with intellectual disability (ID) or acquired cognitive impairment (e.g., Lam et al., 2009; Lau, Cummins, Chan, et al., 2007; Lau, Chan, & Cummins, 2007; Lau, Cummins, Lam, et al., 2007). The detailed findings are in writing process for publishing.

Overall, the performance of these parallel PWI versions appears similar to the Adult PWI. Interestingly, however, the PWI values of younger children and people with ID are found to be higher than the 60–70 normative range values (mean 65) found with Chinese adult populations. For example, while children aged 12–17 have a mean PWI of 70.2 and those with cognitive impairment have a score of 63.4, younger children (aged 6–12) and people with ID have, respectively, a PWI score of 75.5 and 74.8. One possible explanation which is suggested in the research data is that cultural response bias, which is socially learned, is weaker in such groups. These findings reflect the sensitivity of the scale to group-specific and cultural issues.

An important aspect of data validity with these groups is the pre-testing, which is a standard component within the PWI-ID and PWI-PS (pre-school aged). This has demonstrated good "gate-keeping" performance in identifying respondents who cannot adequately understand the task they are asked to perform and also other factors (e.g., respondent's behavior) which would influence data validity and reliability. The same was also found with a slightly modified and brief format trialed with the School-Aged version (PWI-SC), which does not incorporate the standardized pre-testing protocol embedded in the other parallel scales. For example, the screening process identified over 20 % children/adolescents who failed pre-testing related to determined competent use of the 0–10 response scale and acquiescent responding. The incidence of respondent elimination following pre-testing is higher among children who are younger (e.g., aged 7–9: 15–30 %). A similar trend is found with the PWI-ID and also accords with findings using a comparable sample from Australia (e.g., Cummins, Lau, Davey, and McGillivray, 2010; McGillivray, Lau, Cummins, & Davey, 2009). The inclusion of data from such respondents would clearly adversely affect the results.

The PWI parallel forms have, overall, all demonstrated satisfactory psychometric properties. Of these, the psychometric results of the PWI-SC with older adolescents (12 years and over) are most similar in mirroring the Adult version with general populations. The psychometric performance of the PWI-SC with younger children and PWI-ID with people who have ID or cognitive impairment is also very similar but tends to be less robust. For example, the Cronbach's alpha of the PWI-SC with older adolescents is 0.84 but is slightly lower at 0.67–0.70 in the same scale with younger children and the ID version. Although all versions form a single stable factor, the variance accounted for with older adolescents (47.2 %) is about 12 % higher than with younger adolescents and ID (34.4–34.8 %). A similar discrepant pattern is found in the domain contributions to GLS variance. A further difference concerning the PWI-SC is that when "satisfaction with school life," a new domain recently identified in Australia by Tomyns and Cummins (2011, 2012), was added, it made a unique and even higher domain contribution in Hong Kong (4 % vs. Australia 1 %).

Noteworthy Domains

Among all the PWI domains, the question item on "community connectedness" has tended to show the least consistent psychometric performance in all PWI versions, even though it still fulfills as a domain within the scale. This includes lower item-total, inter-domain correlations, and factor loading. It is also less commonly found to make independent contribution to GLS variance than other domains. Other less consistent performance concerns the "safety" and "security" domains. These domain items carry the highest level of abstractness and conceptual complexity, which can be complicated by their cultural interpretation with Chinese respondents.

Conclusion

Over the past decade, as a result of the collective outcomes, China researchers affiliated with the International Well-being Group have produced significant new understanding of the PWI as a cross-cultural SWB measure. These findings and relevant implications have also generalized to SWB measurements using the index in other Chinese or East Asian communities (e.g., Taiwan, Singapore) and other countries.

Although the instrument has consistently demonstrated favorable performance, it is a tool "under evolutionary development" and there are some aspects which will benefit from further consideration. For example, more understanding regarding the *spirituality-religion* domain and less robust domains will be valuable. More widespread use of the parallel forms will be advantageous. It will also be beneficial to develop more research which incorporates a longitudinal design such as with the Macau surveys. It will also be worthwhile to consider standardization of translation techniques. The PWI has, at this stage, been more commonly used in social indicator research in China with the exception in Hong Kong, where it has also been researched or used with other sectors (e.g., health care and community service provision, government sector). Because the scale has demonstrated robust performance as a sensitive diagnostic and outcome SWB indicator also in other sectors, the tool has the potential to become more widely used for this purpose in other places.

Cross-References

- ▶ Adolescents in Spain, Application of the Personal Well-being Index (PWI)
- ▶ Algeria, Personal Well-Being Index
- ▶ Algerian Secondary School Students, Application of the Personal Well-being Index (PWI)
- ▶ Australia, Personal Well-Being Index
- ▶ Croatia, Personal Well-Being Index
- ▶ Ethnic Tibetans: Application of the Personal Well-being Index (PWI)
- ▶ Israel, Personal Well-Being Index; Application to Different Population Group
- ▶ Personal Well-Being Index from Five Capital Cities in Mainland China
- ▶ Personal Well-Being Index in New Zealand
- ▶ Spain, Personal Well-Being Index; Application with People Aged 50 Years and Older
- ▶ Spain, Personal Well-Being Index; Validation with Older Adults

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China, Quality of Life

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Definition

QOL is a comprehensive measure of general well-being of individuals and societies. QOL in China consists of objective and subjective components. The objective indicators (objective well-being) measure tangible physical conditions or resources, such as per capita income or access to education and health care. The subjective component (▶ Subjective Well-Being) is conceptualized as multidimensional and multilevel and is measured in terms of ▶ happiness, ▶ enjoyment, and accomplishment, shaped by demographic characteristics, lifestyles, value priorities, and satisfaction with various life domains.

Description

Objective Measures of QOL in China

Chinese society has since the late 1970s experienced some of the most rapid advances in human history, and the objective measures of QOL have seen large improvement. China's GDP enjoyed an average annual growth rate of 9.3 % in the last three decades, and the total GDP grew more than eightfold. Per capita GDP grew more than six times, and household consumption grew more than five times (China National Bureau of Statistics, 2009). China has lifted more than 400 million Chinese people out of poverty (Ravallion & Chen, 2004). The consumption structure of both urban and rural residents has experienced substantial change, with the relative expenses on food and clothing declining (China National Bureau of Statistics, 2009). Life expectancy has also increased rapidly (China National Bureau of Statistics, 2003). China's ▶ Human Development Index Ranking

increased 20 % since 1990 (United Nations Development Program, 2005).

The health of the Chinese population has improved rapidly as a result of better nutrition. ▶ Life expectancy increased from about 41 years in 1950 to 69 years in 1998 to 73 years in 2006. Infant mortality declined more than 40 % from 37 per thousand in 1990 to about 20 per thousand in 2006 (World Health Organization, 2008). However, many of the free public health services provided to the rural population have disappeared in the last 20 years, and health care has become largely a private fee-for-service industry during China's market transition.

▶ Education in China has also witnessed tremendous progress. As of 2005–2008, the literacy rate for the adult population aged 15 and older was 94 %, while the literacy rate among 15–24-year-olds was 99 % (UNICEF, 2012). For non-compulsory education, China adopts a shared-cost mechanism, charging tuition at a certain percentage of the cost. This policy has posed considerable difficulties for students from low-income families and regions.

China actively partakes in globalization and is increasingly engaged in international trade and cultural exchanges. Its total imports and exports grew more than 30-fold, and foreign direct investment increased more than 12-fold (China National Bureau of Statistics, 2009) from 1978 to 2002. China received more than 36 million international tourists in 2002, and more than 16 million of its residents traveled to other countries that same year (China National Bureau of Statistics, 2009).

However, much of China's phenomenal economic advance has yet to be translated into ▶ social progress. The Communist state continues its one-party rule and controls all of the vital institutions (all levels of government, all levels of legislature, the military, the courts, and police) and major industries (utilities, telecommunications, and banking), despite market reforms. Economic reforms also led to massive layoffs from state-owned enterprises. From 70 % to 80 % of rural households no longer have medical insurance after China's socialized health-care system was dismantled (United Nations Development Program, 2005). Income inequalities, both between individual citizens and between rural and urban regions, have been on the rise. The uneven economic development and globalization also resulted in regional inequality within China, with the coastal regions enjoying a much higher level of economic affluence and social development than the hinterland (United Nations Development Program, 2005).

Despite fairly stringent regulations, the environment of China continues to deteriorate. While seeking economic development, local communities frequently disregarded environmental regulations (Ma & Ortalano, 2000). With rapid industrialization, ▶ air quality in large cities has rapidly deteriorated. As a result, 17 of the 20 most polluted cities in the world are Chinese (World Bank and China State Environmental Protection Administration, 2007). Due to expansion of deserts and poor agricultural practices, Northern China now suffers from dust storms each spring. In addition, China faces a severe water crisis as increased industrial production has created considerable water pollution in many of the country's rivers. The drinking water of 300 million peasants is unsafe, and water quality in one fifth of the cities is not up to standard. In addition, 400 out of 600 cities suffer from a water shortage (Ma, 2004).

Subjective Measures of QOL in China

The Chinese feel more positive than negative about their lives. Substantial majorities experience feelings of happiness, enjoyment, and accomplishment. According to data from the 2006 Asia Barometer Survey (ABS), a national sample of 2,000 males and females aged 20–69, the majorities reported the experience of these three qualities. Specifically, 74 % say that they enjoy life very often or sometimes, 62 % are very happy or quite happy, and 58 % have achieved a great deal or some of what they want out of life. However, those who report the most positive ratings constitute minorities with 23 % enjoying life often, 19 % feeling very happy, and 9 % achieving a great deal of what they want out of life (Shu & Zhu, 2009). Their sense of well-being is, moreover, higher than that of South Koreans

and residents of Hong Kong who live in greater prosperity (Park, 2009; Sing, 2009). This finding is consistent with earlier research that also showed the Chinese tend to hold a greater sense of well-being than people from countries with similar or higher levels of GNP per capita (Inglehart & Klingemann, 2000).

There are four plausible explanations for relatively high levels of subjective well-being in China. First, the Chinese evaluate their lives by historical comparison. They compare their current life, made possible by economic gains achieved in the last few decades, with what they experienced during childhood and arrive at a favorable assessment of their present (Parducci, 1995). Second, sustained high economic growth gives people a sense of freedom and optimism. The future economic prospects of a country make people optimistic about their own situation. Economic growth gives people the feeling that opportunities are there, and it is within their power to improve their lives. Third, satisfaction with interpersonal life is high in China. Close to 60–70 % are happy with their marriages, friendships, family life, and neighbors. Satisfaction with the interpersonal life sphere is the most powerful predictor of subjective well-being in China, and as a result, it has a strong favorable impact on overall life quality. This strong relationship between the interpersonal life sphere and life quality reflects the significance and centrality of social relationships in Confucian culture. A good life in China is a social one as individuals are embedded in circles of relationships. Lastly, a high percentage of married people also contributes to a high degree of subjective well-being in the Chinese population. Extensive evidence shows that married people tend to evaluate life more positively than do the unmarried. In China, more than 80 % of adults are married, and this is bound to have a positive impact on the people's experience of well-being.

Life Domain Satisfaction

The top five most satisfying life domains are marriage, friendship, health, family life, and neighbors according to the 2006 ABS (Shu & Zhu, 2009). The bottom five domains are the social welfare system, the democratic system, public safety, household income, and job. Most of the domains in the top five groups belong to the interpersonal life sphere, while most of those in the bottom five belong to the public life sphere (Shu & Zhu, 2009). Chinese people are most satisfied in the sphere of interpersonal life and least satisfied in that of public life. In the interpersonal life sphere which includes marriage, friendship, family life, and neighbors, a majority are satisfied with all the items, and only a small minority reports dissatisfaction with any of the interpersonal life domains. In the public life sphere, on the other hand, only minorities are satisfied with the four domains of the environment, public safety, the democratic system, and the ▶ social welfare system. Moreover, those expressing dissatisfaction outnumber those expressing satisfaction in all of these domains, excepting the environment. Concerning the social welfare system, the dissatisfied are nearly four times as numerous as the satisfied. In the other three life spheres, personal life, material life, and nonmaterial life, the dissatisfied outnumber the satisfied by a large margin. Ordinary citizens in China are least satisfied with the public sphere of their lives.

Demographic characteristics affect individuals' evaluations of the life spheres in China (Shu & Zhu, 2009). Women are significantly more satisfied with material and public life domains than are men. Compared with married and singles, the divorced or separated or widowed are significantly less satisfied with three of the five life spheres: personal, material, and nonmaterial. Age is positively associated with satisfaction with material and public life domains, and those in their 60s are the most satisfied with all five life domains. Household income is positively associated with satisfaction in all five life domain spheres. Compared with those with a low income, those with a middle and high income are significantly more satisfied with all five life spheres. Education is positively correlated with satisfaction in all of the domains except public life. The unemployed are significantly less content than the employed are with their personal, nonmaterial, and public lives.

Compared with rural residents, urban residents are significantly less content with their material life but are more content with their nonmaterial life.

Value priorities also influence evaluations of life spheres in China, according to the 2006 ABS (Shu & Zhu, 2009). ▶ Materialism is negatively correlated with subjective well-being (Kasser, 2000; Sirgy, 1998). People who view material goods and services as more important than other resources such as interpersonal relationships and personal growth are known to be less happy than people with the opposite view (Ryan & Dziurawiec, 2001). The two indicators of materialism – having a comfortable home and having enough to eat – are negatively associated with satisfaction levels for all five life spheres (Shu & Zhu, 2009). Too much concern with physical health also appears to detract from satisfaction in all these spheres.

Direct and Indirect Influences on Subjective Well-Being

Three factors directly influence subjective well-being in China: satisfaction with certain life spheres, relative assessments of one's living standard, and marital status (Shu & Zhu, 2009). Value priorities and other demographic characteristics, including education, household income, being divorced or separated or widowed, employment status, and community size, do not have a direct influence on evaluation of life quality, but they do affect how satisfied individuals are with various life domains, as well as how they evaluate their standard of living compared to others, and domain satisfaction and standard of living evaluation have direct bearings on subjective well-being.

- *Life domain satisfaction,* satisfaction in the interpersonal, material, and nonmaterial spheres of life, contributes directly to the experience of happiness, enjoyment, and accomplishment. Of these three spheres, the interpersonal life sphere shapes the experience of such well-being most powerfully. In China, interpersonal relationships have the greatest direct bearing on the way in which the Chinese people appraise their quality of life.
- *Relative living standard* is another important predictor of subjective well-being. The more positively the Chinese evaluate their standard of living relative to others, the greater the quality of life they experience. It is Chinese people's subjective ranking of living standards, not the actual level of income at their disposal, that directly affects their perceptions of life quality. This finding also confirms the importance of social life as a criterion for the appraisal of life quality.
- *Marriage* makes people perceive their life more positively and experience more happiness, enjoyment, and accomplishment. This finding is consistent with a large number of prior studies from different countries and periods (e.g., Diener, Gohm, Suh, & Oishi, 2000).

Satisfaction with life domains and subjective evaluation are mediating factors for a number of indirect influences on subjective well-being (Shu & Zhu, 2009).

- *Age*, *education*, *household income*, *being divorced or widowed*, and *value priorities* are *indirect* influences on subjective well-being, mostly through satisfaction with life domains. The oldest age group, those aged 60–69, are the most satisfied with their interpersonal, material, and nonmaterial life spheres. The better educated and those from households with higher incomes also have higher levels of life satisfaction for these three spheres. The divorced and separated and widowed are less satisfied with these three life spheres. In addition, those who emphasize "having enough to eat" and "having access to medical care" tend to evaluate their interpersonal, material, and nonmaterial life spheres as less satisfying. Age is positively associated with value priorities on these aforementioned two value orientations; older people are more likely to emphasize "having enough to eat" and "having access to medical care."
- *Household income*, *being divorced/separated/widowed*, *unemployment*, and *urban residence* also have an *indirect* influence on subjective well-being by affecting how Chinese people rate their relative standard of living.

Those with a high household income are more likely to rate themselves as having a relatively higher living standard than those with a low household income. People who are divorced/separated/widowed are more likely to see themselves as having a relatively lower living standard, even after controlling for their real household income. The unemployed and urban residents also tend to rate themselves lower on relative living standard after controlling for the real income than do their counterparts. These negative effects of divorce and separation and widowhood, unemployment, and urban residency demonstrate the power of social comparison. Regardless of their actual income, these individuals who compare themselves negatively with their peers see their standard of living as low.

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Chinese Aging Well Profile

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Synonyms

CAWP

Definition

The Chinese Aging Well Profile (CAWP) is a 31-item scale for assessing ▶ subjective well-being in late middle-aged and older Chinese (50+) (Ku, Fox, & McKenna, 2008). The scale was developed to examine the overall level of SWB (i.e., "general" well-being) and the levels of the seven dimensions of SWB, including (1) "physical" well-being: the extent to which you feel you have maintained a strong, healthy body and an energetic lifestyle, free from pains and illnesses; (2) "psychological" well-being: the extent to which you feel you maintain cognitive function

and you feel positive toward daily life rather than negative; (3) "learning and growth" well-being: the extent to which you feel you have the ability to learn and can develop yourself and pursue self-growth; (4) "independence" well-being: the extent to which you feel you can take care of yourself; (5) "material" well-being: the extent to which you feel you do not need to ▶ worry about financial situations; (6) "environmental" well-being: the extent to which you feel you are satisfied with living environment and ▶ leisure life; and (7) "social" well-being: the extent to which you feel you are able to maintain a close relationship with your family and friends and provide support to others in the community.

Description

Each culture and every social class may tend to have its own unique image of the good later life (Clark & Anderson, 1967). The need for culture-specific instruments for assessing ▶ subjective well-being (SWB) is highlighted by evidence showing that SWB can have distinct meanings across different cultures (Ingersoll-Dayton, Saengtienchai, Kespichayawattana, & Aungsuroch, 2001; Keith et al., 1994; Ku, McKenna, & Fox, 2007; Torres, 1999). Ingersoll-Dayton et al. (2001) explored the perspective of psychological well-being among older people aged 60 and over in Thailand and compared the results with the views on psychological well-being in an American population conducted by Ryff (1989). All the dimensions of the well-being of Thai elders are apt to involve other people (i.e., "other-oriented"). In contrast, Ryff's Western framework of well-being is more likely to be "self-oriented." Ingersoll-Dayton et al. (2004) claimed that Ryff's instrument is less applicable to ▶ Asia in spite of the fact that it seemed work well for European and American population. Likewise, Christopher (1999) also doubted the universality of Ryff's six dimensions of SWB, which are mainly based on the individualistic orientation of a Western psychological tradition. He maintained that although certain elements of well-being may be shared across societies, their meaning and importance are likely to be interpreted and weighted differently.

Suh, Diener, Oishi, and Triandis (1998) reported similar findings. They compared the relative importance of emotions versus normative beliefs for ▶ life satisfaction assessment between individualist and collectivist countries. It indicated that personal emotional experience of life satisfaction in individualistic countries such as the USA and European countries was more important than ▶ norms (social approval of life satisfaction). In collectivist countries, such as China and India, emotional experience and norms were equally important for experiencing life satisfaction. Thus, it appears that people in individualistic societies are more likely to focus on their own lives. In contrast, people in collectivistic societies are more likely to consider the well-being of their family when they assess their own well-being. This is consistent with the research by Triandis (1995) which suggested that people in collectivistic societies tend to emphasize norms, roles, obligations, and family integrity, whereas individualists believed in self-reliance and hedonism. Diener, Oishi, and Lucas (2003) questioned the possibility of a universal model of SWB across cultures. They claimed that the measurement of SWB derived from Western countries might be weighted toward Westernized values rather than toward other non-Westernized societies. Given the differences among different societies, people in Eastern and Western societies might construct SWB in different ways (Diener, Suh, & Oishi, 1997). Individualism and collectivism provides an analytical point of view. Hofstede (1980) ranked Taiwan 44th of 53 worldwide regions on his measure of individualism. A number of studies across different time frames and populations have consistently showed that Taiwan is similar to its neighboring countries, such as ▶ Japan, mainland China, ▶ Hong Kong, ▶ Singapore, ▶ South Korea, and Thailand, which are collectivist-oriented nations (Hofstede, 2001; Suh et al., 1998). Despite progressive social modernization and Westernized lifestyle, a recent study in Taiwan showed that traditional collectivist orientations continued to thrive (Lu & Kao, 2002). These should be born in

mind when interpreting the conception of SWB in Taiwanese.

In another study of well-being in Chinese in Hong Kong (Cheng & Chan, 2005), measures were based on an instrument that subsequent confirmatory factor analysis revealed had limited validity and reliability for older groups. Therefore, studies designed to address the effects of physical activity on SWB in older Chinese are scarce and might be criticized for their failure to employ cultural- and age-sensitive measurements.

The CAWP was developed using qualitative and quantitative methods, comprising six sequential stages of data collection (Ku et al., 2008):

1. Stage One (dimensions and subdimensions identification): Qualitative interviews ($n = 23$) were adopted to explore the underlying dimensions and subdimensions of SWB among older Chinese. A total of 210 lower-order themes, 21 subdimensions, and seven dimensions were identified through the inductive coding and categorizing process.
2. Stage Two (instrument construction): Seventy-nine items were generated to represent the salient content of the seven dimensions. Each item were presented in a five-point Likert format (from 1 "strongly disagree," 2 "disagree," 3 "moderate," 4 "agree," 5 "strongly agree"). Thirty older adults (men = 11) were then selected by snowball sampling to assess clarity and ambiguity of the items (face validity). They were requested to evaluate the importance to the well-being of older people. Content validity of items was examined for appropriateness and comprehensiveness by two experts with a PhD in education.
3. Stage Three (item analysis and ▶ exploratory factor analysis): This stage constituted an initial item analysis and factorial validity as well as an initial assessment of convergent-divergent validity ($n = 152$). Items were tested for their ability to distinguish between those with higher SWB (above the percentile rank 73 of the total score of all CAWP items) from those with lower levels (below the percentile rank 27) (Streiner & Norman, 2003). Three items were removed based on the results of the independent sample *t*-test. Before performing exploratory factor analysis, another six items were eliminated due to the concern about multicollinearity (Belsley et al., 1980) and the lower values of KMO test (de Vaus, 2002). ▶ Principal component analysis was conducted on the responses to the remaining 70 items. Based on the Kaiser's criteria (eigenvalues greater than 1) and the screen test, seven factors were clearly selected. Given the low-to-moderate intercorrelation among the seven factors, the oblique rotation was adopted, leading to 53 items included in the seven matrices, which explained 59.10 % of the total variance among the items. Based on the analyses of internal consistency using ▶ Cronbach's alpha (>0.70), item-subscale total correlations (<0.30), the number of items in each subscale was further reduced from 53 to 42. Additionally, the 42-item CAWP demonstrated adequate convergence with related measures, including the Diener's ▶ Satisfaction with Life Scale (Hung, 1997), the Rosenberg's ▶ Self-Esteem Scale (Liu, 2003), and ▶ Positive Affect (Oishi, Diener, Suh, & Lucas, 1999) and divergence with dissimilar measures (e.g., ▶ Negative Affect) (Oishi, et al., 1999).
4. Stage Four (refinement of factor structure): Exploratory and confirmatory factor analyses were conducted in this stage ($n = 198$). Before performing exploratory factor analysis, 2 items were removed due to multicollinearity. Principal components analysis using oblique rotation showed the seven-factor structure of 36 items explained, 69.23 % of the variance among the items. Additionally, for the instrument to be included in a national telephone survey conducted by Taiwan Sports Affairs Council in stage six, the total number of items was requested to reduce from 36 items to 31 items. The 31-item models (first-order and second-order) were tested by confirmatory factor analysis using EQS 6.1 (Bentler, 2005), yielding acceptable model fit.
5. Stage Five (▶ test-retest reliability): Fifty-one older adults completed the 31-tiem CAWP on

Chinese Aging Well Profile, Table 1 Means, standard deviations and Cronbach's alpha of the CAWP by gender

	Male ($n = 774$)			Female ($n = 645$)		
	M	SD	α	M	SD	α
General level[a]	3.60	.58	.86	3.49	0.60	.85
Physical	3.65	.76	.79	3.45	.79	.81
Psychological	3.71	.72	.77	3.58	.79	.83
Independence	3.94	.74	.85	3.85	.74	.83
Learning & growth	3.60	.83	.80	3.50	.87	.82
Material	3.27	1.0	.87	3.10	1.0	.86
Environmental	3.30	.79	.70	3.35	.75	.67
Social	3.80	.73	.78	3.78	.73	.77

Source: The table is adapted from Ku et al. (2008, p. 455)
[a]The level of "general" well-being (scale mean) was computed using the means of the seven subscales

two occasions over a 2-week period. Reliability was assessed for the scale and each subscale using paired samples *t*-test, Pearson correlation, and two-way mixed effect model with absolute agreement for single measurements of intraclass correlation (Schuck, 2004). *t*-test results showed that no significant time differences were observed for the scale mean and subscale means. Apart from the "material" subscale ($r = 0.57, p < 0.001$), all exceeded or were close to the recommended level of $r = 0.70$ (de Vaus, 2002). Intraclass correlation ranged from 0.57 to 0.76 ($p < 0.001$), indicating adequate test-retest (Fleiss, 1986).

6. Stage Six (factor confirmation): This stage provided a more rigorous test of reliability and validity of the 31-item CAWP using a large sample from national physical activity and successful aging telephone survey funded by Taiwan Sports Affairs Council ($n = 1{,}450$). The scale mean, subscale means, standard deviations, and alpha coefficients by gender are shown in Table 1. Alpha coefficients (0.70–0.86) were satisfactory with the exception of "environmental" well-being (0.67), which, however, is acceptable. The models (first-order and second-order) were further tested by confirmatory factor analysis based on the nationally representative sample, demonstrating satisfactory model fit.

Discussion

Instrument construction was first developed based on the qualitative responses of the target population. The items of the CAWP were then refined and reduced through five sequential data collections, revealing initial evidence of reliability and ▶ construct validity. The psychometric properties were extensively examined with a nationally representative sample of Chinese older adults in Taiwan. Additionally, the CAWP has been successfully utilized in other studies in recent years (Ku, Fox, Chen, & Chou, 2011), providing further evidence of reliability and validity. To sum up, the instrument provides a reliable and valid profile for assessing SWB in Chinese older population. However, further work on the ability of the profile to determine group and individual differences and its sensitivity following interventions or naturally occurring events are still needed. The study comprised several stages of data collection, including a nationally representative sample. The means of the scale and the seven subscales in the current study provide the normative properties of the profile. The slight negative skewness in the means of subscales is consistent with other cross-national data, indicating that there is a positive level of SWB around the world (Diener & Diener, 1996).

Cross-References

- ▶ Happiness
- ▶ Hedonism
- ▶ Life Satisfaction
- ▶ Quality of Life
- ▶ Well-being
- ▶ Wellness

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Chinese Beliefs About Adversity Scale

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Definition

The Chinese cultural beliefs about adversity scale is an indigenously developed scale which attempts to assess positive and negative Chinese cultural beliefs about adversity.

Description

Personal and Cultural Beliefs about Adversity

Why can some people adjust well in face of adversities or socioeconomic disadvantage? The

literature suggests that there are a wide range of psychosocial protective factors for people in environmental hazards. Personal beliefs such as optimism and faith are considered important factors at the individual level. Werner (1989) showed that optimism and beliefs about control in lives were related to the adjustment of high-risk children. Werner and Smith (1992) also suggested that faith and religious beliefs were important protective factors. Such findings are consistent with the basic assertion of the cognitive perspective that people are not disturbed by things that have happened to them (i.e., adversity per se) but by their interpretations of these events (i.e., meaning and interpretation of adversity).

It is important to note that personal beliefs are strongly influenced by culture. According to Pepitone (1994), "beliefs are concepts about the nature, the causes, and the consequences of things, persons, events and processes" and they are "social constructions that are part of a culture and have guided the socialization of those who share that culture" (p. 140). Phinney (1996a) suggested that one important aspect of ethnicity is concerned about the degree to which a person assumes or identifies with the "norms, values, attitudes, and behaviors that are typical of an ethnic group and that stem from a common culture of origin transmitted across generations" (p. 145). As such, cultural beliefs about adversity can be defined as those concepts about the nature of adversity including its causes, consequences, and the proper coping strategies in a particular culture.

Shek and colleagues proposed that cultural beliefs may influence the impact of adversity on people in at least three ways (Shek, 2002; Shek, 2004; Shek et al., 2003). First, cultural beliefs affect how adversity is defined and conceptualized. For example, adversity may be seen as a chance for personal development that is eventually beneficial to the individual concerned. From this point of view, there appear to be benefits from adversity (Affleck & Tennen, 1996), and tolerance for the threat would be greater. On the other hand, if adversity were seen as punishment from God, retribution, or transmigration, it would be more difficult for the person concerned to accept it. Second, cultural beliefs may shape the coping resources and behavior of the individual concerned. McCarty et al. (1999) showed that Thai and American youth have different coping patterns. Rokach (1999) reported that participants with North American, South Asian, and West Indian backgrounds coped differently and concluded that "cultural background and the norms and expectations that people assimilate during their formative years are related to the manner in which individuals cope with loneliness" (p. 227). Third, cultural beliefs may constitute stressors that influence one's adjustment. For example, effort to uphold traditional cultural beliefs in a modern society would be stressful for an adolescent. Bains (2001) showed that traditional cultural beliefs may create conflict for adolescents when they attempted to develop their sense of self. In short, cultural beliefs provide the basis upon which people experiencing adversity make sense of their experience and develop the act of coping; they might also constitute stressors for them as well.

How can a person's endorsement of cultural beliefs about adversity be measured? While this is an interesting question both theoretically and practically, Phinney (1996b) pointed out "in fact, this is rarely done" (p. 921). Similarly, Pepitone (1994) stated that "despite their importance in the social life of human subjects, however, the literature of social psychology contains little theory and research on the subject" (p. 139). In fact, although there are measures focusing on personal beliefs such as beliefs about control and the future, instruments designed to assess particular cultural beliefs about adversity are almost nonexistent.

Chinese Cultural Beliefs about Adversity Scale (C-CBAS)

Putting this question within the context of the Chinese culture, Shek et al. (2003) further raised several issues. First, very few studies have been conducted to examine adolescent adversity and resilience (Shek, 2002). Second, no known scientific study had been conducted to examine the

linkage between one's endorsement of Chinese cultural beliefs about adversity and one's adjustment. In fact, as pointed out by Leung (1996), research on beliefs "has been haphazard" (p. 247) and "there is a dearth of theorizing and data on the belief systems of Chinese" (p. 262). Although Leung (1996) highlighted several categories of cultural beliefs in the Chinese culture, Chinese cultural beliefs about adversity are unfortunately not included in his discussion.

Based on a comprehensive literature review, Shek et al. (2003) proposed that Chinese cultural beliefs about adversity can be roughly classified into two categories. On the one hand, there are cultural beliefs that emphasize the positive value of adversity and people's capacity to overcome adversity (i.e., positive beliefs about adversity). Such cultural beliefs are basically shaped by Confucian thoughts where people's inner strengths and virtues, such as perseverance and tolerance, are strongly maintained (Tseng, 1973; Yip, 1998). On the other hand, under the influence of Buddhism and Taoism, superstition and emphasis on fate are intrinsic to the traditional Chinese culture (Yang, 1981). As a result, there are cultural beliefs that emphasize people's inability to change adversity (such as fate) and the negative impact of adversity (i.e., negative cultural beliefs).

Based on this conceptualization, Shek and colleagues (2003) developed the Chinese Cultural Beliefs about Adversity Scale (C-CBAS) to measure the extent to which one endorses Chinese beliefs about adversity. There are 9 items in this scale, including 2 items on negative cultural beliefs and 7 items assessing positive cultural beliefs.

Psychometric properties of the C-CBAS have been reported in a series of studies based on both adolescent and adult samples (e.g., Shek, 2002; Shek, 2004; Shek et al., 2003). First, the internal consistency of the scale was supported in different studies. Second, significant relationships were consistently found between one's endorsement of positive Chinese cultural beliefs about adversity and different psychological adjustment indicators. Those who had stronger endorsement of Chinese positive beliefs displayed less mental health problems and problematic behaviors. Adolescents with higher level of positive beliefs also displayed better school adjustment. Third, endorsement of negative Chinese cultural beliefs about adversity was negatively associated with psychological health. People who had stronger endorsement of Chinese negative beliefs about adversity displayed more mental health problems and problem behaviors, with adolescent participants showing poorer school adjustment. These findings provided evidence for the construct validity of the C-CBAS.

With regard to the dimensionality of the C-CBAS, the results of principal component analyses on a sample of 1,519 adolescents showed that there were two factors of the scale, which could be labeled "positive Chinese cultural beliefs about adversity" (including items 1, 3, 4, 6, 7, 8, and 9) and "negative Chinese cultural beliefs about adversity" (including items 2 and 5). By randomly splitting the total sample into two subsamples, analyses showed that these two dimensions were associated with very high coefficients of congruence (0.99 for both dimensions), thus suggesting the stability of the two dimensions of the scale. The factor structure was also consistent with the conceptual model of the scale, indicating that the C-CBAS is an objective measure of Chinese cultural beliefs about adversity with high factorial validity.

Furthermore, a longitudinal study was conducted on a sample of 199 Chinese adolescents with economic disadvantages to further test the relationships between Chinese cultural beliefs about adversity and psychological well-being (Shek, 2005). The results showed that the C-CBAS was internally consistent at both Time 1 and Time 2 (after 1 year). Adolescents' endorsement of Chinese cultural beliefs about adversity was concurrently related to measures of adolescent psychological well-being (including existential well-being, mastery, life satisfaction, self-esteem) and problem behaviors (substance abuse and delinquency) as predicted. While Chinese beliefs at Time 1 generally predicted changes in developmental outcomes at Time 2, developmental outcome variables at Time 1 did not predict cultural beliefs

at Time 2. These findings provide further evidence for the psychometric properties of the C-CBAS over time and suggest that Chinese cultural beliefs about adversity is an important factor that influences the psychosocial adjustment of Chinese adolescents experiencing economic disadvantage.

Cross-References

- ▶ Chinese Culture
- ▶ Quality of Life
- ▶ Resilience

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Chinese Culture

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Definition

Chinese culture refers to an extensive set of behavioral norms and beliefs shared to a varying degree by Chinese people. It is based on an ancient civilization incorporates folk culture, dominant philosophical ideas and religious traditions. The fundamental influences Chinese culture exerts on its members can be seen in intrapersonal, interpersonal, and transpersonal domains.

Description

Through its long history of nearly 4,000 years, China has seen the formation and evolution of a complex culture whose norms, beliefs, and practices cover many aspects of life. While the cultural landscape of China is as vast and varied as its geography, many of its prominent features are derived from the philosophies and practices of Buddhism, Confucianism, and Daoism (also known as Taoism). The discussion of this entry will focus on how Chinese culture manifests itself in intrapersonal, interpersonal, and transpersonal domains of everyday life in modern times.

A caveat is in place: To think of China as a homogenous nation-state carries the risk of being negligent of the fact that its history is marked with extended factious periods and influenced by wide ethnic subcultures which coexist with the more dominant Han or Tang lifestyles both in the past and present and that Chinese people, especially those who are living overseas, are dealing with shifting identities and evolving cultural configurations.

Confucianism, Daoism, and Buddhism

One cannot examine traditional Chinese culture without delving into Confucianism – the ethical and philosophical system that underpins Chinese, Korean, Japanese, and Singaporean societies and has overwhelmingly affected the development of Chinese civilization. Like Plato, the teachings of Confucius (551–479 BC) are documented by his disciples instead of being written by the sage himself. The resulting work, *Analects*, describes the Confucian ideal in both moral and social terms: A man should devote himself to lifelong self-cultivation through nurturing proper social conduct and disposition. Benevolence (*ren*) is a cardinal virtue that should be expressed in accordance with a predefined, hierarchical socio-political order.

Complementing this in-the-world philosophy is the more spiritual Daoism, the origin of which is attributed to Laozi (sixth century BC). The central concept of Daoism is the Way (*dao*), a constant amidst the ever-changing world of transient and ephemeral appearances. A Daoist sage who attains the balance of *yin* and *yang*, the two dynamic and antagonistic forces behind all things in nature, is said to be in harmony with the Way. Not only does the pursuit of balance applicable to Daoist followers, it extends to every intricate detail of Chinese way of life. While Confucian self-cultivation is about safeguarding social mores and maintaining political order, adherents to Daoism are more concerned with achieving balance with nature, homeostasis within the body, and harmony in society. Daoist concepts and practices are developed into Traditional Chinese Medicine and popular *yang sheng* health practices among the Chinese population.

Intrapersonal Domain

Deeply ingrained in the Chinese culture is the Confucian emphasis on human relationship and the Daoist concept of harmony. That has led researchers to wonder whether Chinese culture can fundamentally shape the ways through which individuals understand and react to the world. Nisbett, Peng, Choi, and Norenzayan (2001) contrasted Chinese and Greek culture and found that the Chinese culture favors continuity (over discreteness), focuses on the field (instead of individual objects), is concerned more with discerning relationships among objects (than with deducing rules from them), develops dialectic (in place of logic), and prefers experiential learning (to abstract analysis). These cultural predilections are found to have consequences in a person's cognitive processing pertaining to perception, sense of self, and learning style.

Sense of Self. The self in Chinese culture is situated in a web of social relationships. Chinese people construe their sense of self in terms of their relations with others (Rao, Singhal, Ren, & Zhang, 2001). Chinese tends to see collectives, more than individuals, as the unit of agency. As maintaining harmony with others takes precedence in Chinese culture, being modest about one's personal strengths is a valued trait. Studies show Chinese people consistently report lower levels of optimism and self-esteem as well as are less inclined to self-enhancement acts and more culturally predisposed towards self-criticism (Lehman, Chiu, & Schaller, 2004).

Morality. Compared to many Western societies, wherein the concept of individual rights are intrinsic in their system of morality, an important Chinese characteristic to be reckoned with is *ke ji fu li* – subdue oneself and follow the rites (Fei, Hamilton, & Wang, 1992). Fei and associates also argue that contrary to Western societies, there is no existential concept (such as an omnipotent god) that transcends human relationships and that the closest thing to god is the notion of *tianxia* (all things under heaven). Yet, *tianxia* is also ambiguous in meaning and highlights the eclecticism of Chinese culture. The trait of *ke ji fu li*, though, appears to be losing credibility today. Perhaps the increasing number of protests in China is indicative of suppressed rage and highlights the fickleness of such generalized moral trait.

Learning Style. A central tenet of Confucianism is the belief in self-cultivation and meritocracy with a strong focus on acquiring existing knowledge from authority figures rather than independent inquiry. Chinese students have a more instrumental view of education, a preference of structured tasks over open-ended exploration, and a tendency to refrain from questioning authority. The pragmatic nature of learning and the focus on finding and correcting one's weakness result in strong fear of academic failure and reliance on parental recognition as incentive for learning (Bao, & Lam, 2008).

Interpersonal Domain

As Chinese culture places more importance on relationship maintenance, the perceived quality of relationship is a more predictive factor of life satisfaction for Chinese (Kang, Shaver, Sue, Min, & Jing, 2003). Culture-specific patterns of social interactions also affect different aspects of quality of life.

Family Relationships. Filial piety is crucial virtue in Confucianism. The concept dictates obligations, shapes roles, and defines acceptable social behaviors. Many of these values are translated into cultural practices, which continue in contemporary China. It generally encompasses the need to respect, revere, obey, and care for the older generation. Patterns of residence, family support, legal frameworks, and family policy are still heavily influenced by the Confucian dictum (Hashimoto & Ikels, 2005). Chinese parents use a mix of authoritarian and authoritative parenting styles that reflect tradition cultural values which does not fit well with existing parenting theories developed in the West.

Social Relationships. The collectivist nature of the web of interdependent relationships in Chinese society is built on kinship and social interactions. Hwang (1987) suggests that the concepts of face (*mianzi*), favor (*renqing*), and relationships and connections (*guanxi*) are core components in the study of interpersonal relationships in Chinese communities. Face and favor are regarded as "social capital" one accrues by performing public acts that attract social recognition and private deeds to another person's benefit. In a study conducted by Tam and Bond (2002), beneficence (favor doing) and restraint were found to be important traits in sustaining Chinese friendship, reasoning that restraint is interpreted as politeness in the Chinese context.

Gender Bias. Chinese society is still quite male dominant until today. Its patriarchal organization conforms to Confucian hierarchy, in which women are supposed to be subservient to their fathers, husbands, and sons. Many traditional customs, such as dowry and rules of inheritance, reflect such gender oppression. The impact of patriarchal culture can be seen today in the form of higher male-to-female birth ratio, sex discrimination, and practices of gender selection under one-child policy in China. This policy has also elicited undesirable consequence of selective abortion and eugenics (Chan, Blyth, & Chan, 2006). Chinese men also suffer from intense pressure when they deviate from gender roles. For instance, in face of unemployment, men are reported to have bigger deteriorations in mental health than women.

Transpersonal Domain

Ontological understanding of destiny, cause and effect, and suffering are particularly relevant in explaining how Chinese people cope with demands and adversities in life. In Chinese folk culture, destiny is largely predetermined by Heaven (*tian*), yet this apparently fatalistic

conception does not end there. In Daoism and Buddhism, a person is to recognize and be at ease with the inevitable destiny since transcendence comes with this enlightened awareness; in Confucianism, destiny has its preordained missions and responsibilities one has to dutifully fulfill in order to achieve collective good.

Studies of Chinese patients and their family members found that Chinese people readily tap into different philosophies as cultural tools with which they make sense of the illness experience (Leung & Chan, 2009). In Daoism they find the calm acceptance of hardship as part of nature's course; in Buddhism, the idea of *karma* (good deeds reap rewards in future) as an empowering purveyor of hope; and in Confucianism, the stoic embrace of hardship as preordained mission from Heaven. Such mixture of fatalism and activism, described as "fatalistic voluntarism" (Lee, 1985), and this culture-specific coping mechanism were found to have a positive effect on subjective well-being of people in China (Liu & Mencken, 2010).

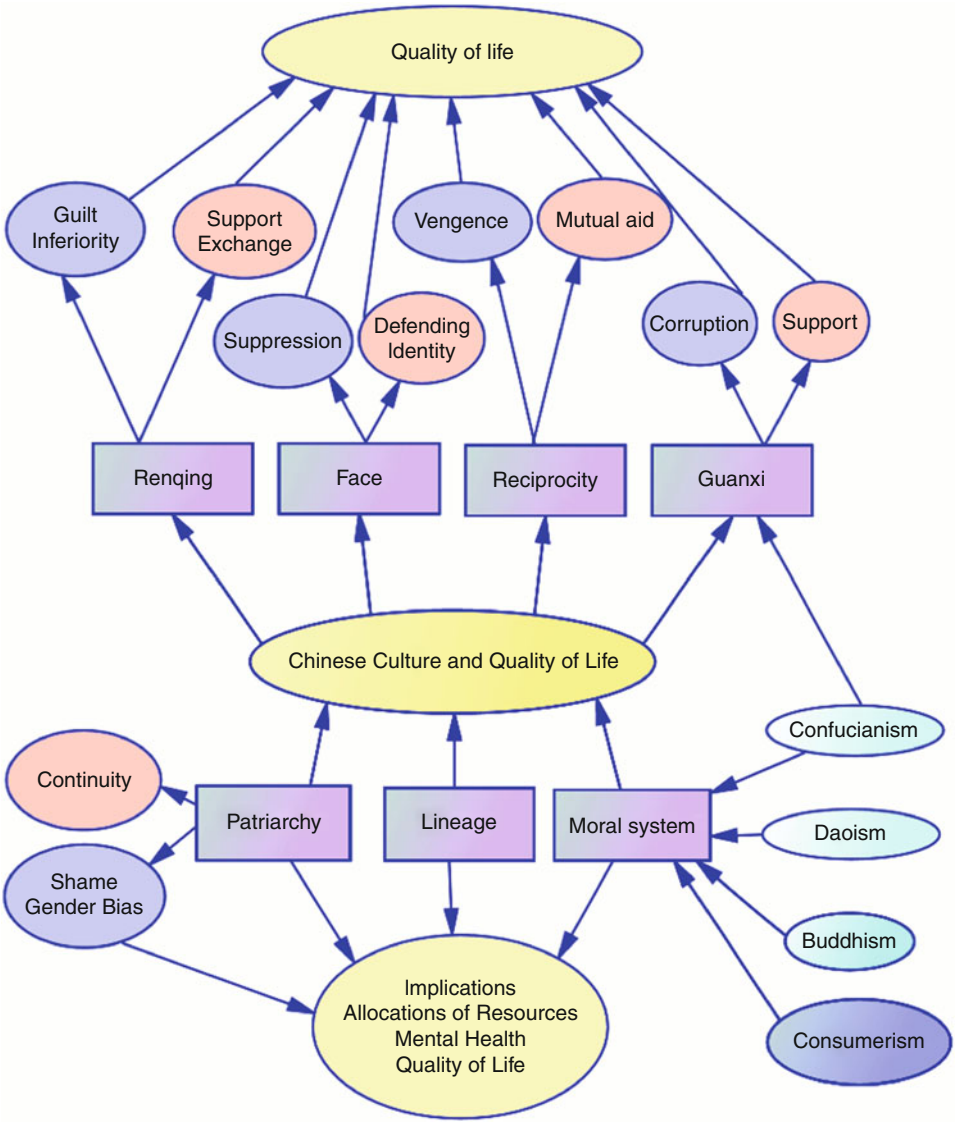
Implications for Quality of Life Research

Measurement. Culture is an important dimension in the measurement of quality of life. In addition to cross-cultural adaptation of measures, there have been attempts to incorporate ideas from traditional Chinese culture into the concept of health and subjective well-being. Shek (2011) systematically reviewed quality of life of Chinese people in a changing world by means of developing measures and scales to assess different aspects of individual and family quality of life in Chinese communities. Ng and associates developed a multidimensional inventory for assessing holistic health based on the Chinese notion of body-mind-spirit connectedness (Ng, Yau, Chan, Chan, & Ho, 2005). Xu and associates (2005) also discovered that Chinese values have significantly affected the perceptions of quality of life among Chinese patients that differ from "Western" culture. They found that Chinese patients ranked physical well-being, rights, material well-being, emotional well-being, personal development, social inclusion, interpersonal relations, and self-determination as pertinent to a good life (Xu, Wang, Xiang, & Hu, 2005).

Clinical Practice. In clinical settings, some consider the Western biomedical model, though effective and inadequate in addressing a person's holistic health. New therapeutic paradigm that incorporates Chinese philosophies and practices has been developed and clinically tested (Lee, Ng, Leung, & Chan, 2009). The integrative approach borrows concepts of balance and harmony and incorporates spiritual teachings and health practices such as breathing exercise, massage, acupressure, and meditation to help elicit positive changes in one's body, mind, and spirit.

Understanding Cultural Contradictions. The framework below captures in brief the processes through which cultural values, as described throughout this entry, are created and reinforced (Fig. 1). In turn, these values shape lifestyles and affect the quality of life. As shown below, the manifestations of *renqing*, *mianzi*, reciprocity, and *guanxi* often have direct effects on the quality of life. However, these qualities entail both positive and negative influences. For example, while the term patriarchy is almost always used as a pejorative term, some argue that it safeguards familial continuity. Similarly, while *guanxi* and the concept of reciprocity can form social support (Hwang, 1987), it can lead to nepotism. Zhang and associates (2004) even found that, due to the overdependence on the "family collective" as a means of reciprocal social support, family disputes are one of the major determinants for committing suicide among rural women. These juxtaposing phenomena illustrate the complex nature of cultural elements and their manifestations.

To understand these contradictions, Fei and associates (1992) pointed out that Chinese cultural ethics are largely contextual, such that there are no universal moral rules that are parsimoniously applied to all social situations. For example, it is rather common to hear Chinese people denounce corruption; but when their own family members commit fraud, they would help conceal the situation without much hesitation. Insofar as the ethics in each social affair is observed, the moral dilemmas and what appear to be cultural contradictions are then easily circumvented.



Chinese Culture, Fig. 1 The cultural web

Culture and Politics. Since the beginning of the twentieth century, sociopolitical upheavals have brought sweeping changes to China. The Maoist era that spanned several decades after the founding of People's Republic of China (P.R.C.) was an extremely hostile environment to traditional Chinese culture, especially during the Cultural Revolution. At the height of the violent sociopolitical movement, all elements from the "old culture" were purged: centuries-old rituals were proscribed, temples burnt, and Confucianism vilified. Political campaigns unraveled the social fabric and replaced traditional kinship system with the mandatory allegiance to the socialist collective (Rao et al., 2001).

As the ruling party no longer advocates puritanical communist ideals and became more focused on economic growth, traditional culture had made a steady revival in the last few decades. At the same time, economical and social changes have a significant impact on collective well-being; for

example, the falling trend of female-to-male suicide ratio in China (Yip, Liu, Hu, & Song, 2005) can be explained by improving living conditions and the changing family structure. China's state policies are becoming increasingly progressive – emphasizing meritocracy over political and class struggles. It appears that with the reemergence of Confucius ethics, collectivism is regaining credibility and desirability. Confucianism is being widely promoted by state leaders in China as a means to promote social stability, compliance to the authority, and social harmony. J. Chan (2007) sees this as a move to promote meritocracy and combat the democratic movement in China.

Nonetheless, years of rapid economic growth, while lifting many out of poverty, continue to cause enormous strains on society as the dismantling of the old welfare state has left millions in the cold fending for themselves, with few channels to express dissent and seek recourse. How the nation's ascent to a global political and economic power will shape its culture, and what implications it has for the quality of life of its people, remains to be seen.

Cross-References

- ▶ China, Quality of Life
- ▶ Chinese Rituals
- ▶ Chinese Values
- ▶ Collectivism
- ▶ Confucianism
- ▶ Hong Kong, Quality of Life
- ▶ Independent/Interdependent Self
- ▶ People's Republic of China
- ▶ Taiwan

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Chinese Family Assessment Instrument

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Definition

The Chinese Family Assessment Instrument is an indigenously developed scale which assesses different dimensions of family functioning in Chinese families.

Description

Family Functioning

A review of the literature shows that different components on optimal families have been proposed. Walsh (1993) suggested that there are several important processes for healthy family functioning, including connectedness, respect for individual family members, positive couple relationship, caretaking and nurturance, family stability, adaptability, open communication, effective problem solving processes, a shared belief system, and adequate resources. Based on the views of therapists and nonclinical family members on the attributes of healthy families, Fisher, Giblin, and Hoopes (1982) reported the following characteristics of healthy families: family members have an attitude of comradeship and mutuality (reciprocally accepting, supporting, and caring one another), honoring agreement, respecting differences, open and direct communication, encouragement of expression of feelings, and members feel secure, trusted, and positive. Quatman (1997) further reported that emotional bonding, mutuality, expressive communication, time together, and love are important attributes of high functioning families.

In the systems-based models derived from studies of healthy families, major dimensions of family functioning and key components of "healthy" families are also proposed. In the Beavers Systems Model (Beavers & Hampson, 1990), systems orientation, clear boundaries, contextual clarity, relatively equal power and the process of intimacy, autonomy, joy and comfort in relating, skilled negotiation, and significant transcendental values are characteristics intrinsic to optimal families. In the Circumplex Model, three dimensions of family behavior (cohesion, adaptability, and communication) are postulated, and families with moderate levels of cohesion and adaptability are hypothesized to be optimal families (Olson, Russell, & Sprenkle, 1989). In the McMaster Family Functioning Model, six dimensions of family functioning (including problem solving, communication, roles, affective responsiveness, affective involvement, and behavioral control) are proposed (Epstein, Bishop, Ryan, Miller, & Keitner, 1993), and the related features have been used to define whether a family is healthy or not.

Chinese Family Assessment Instrument (C-FAI)

With reference to the growing emphases on family intervention and the rising demand for family assessment tools in different helping professions (e.g., Halvorsen, 1991; Reichertz & Frankel, 1993), there is a strong need to develop objective assessment tools on family functioning in different cultures. However, a survey of the literature shows that there is a severe lack of objective measures of family functioning in different Chinese contexts (Shek, 2010). Researchers

warned that the lack of family assessment measures had hindered the development of appropriate family interventions for mental patients in China (Shek, 1998). While some attempts have been carried out to validate Western measures in the Chinese culture and there is support for the translated measures (e.g., Phillips, West, Shen, & Zheng, 1998), this approach has been criticized. The basic criticism is that the translated Western measures may not be relevant to non-Western people and they may not be universally applicable. The second approach that can be adopted is to develop indigenous measures of family assessment by constructing culturally sensitive measures. The adoption of this approach requires the researchers to have a thorough understanding of family processes and related cultural emphases in that particular culture. It also demands that the indigenous measures developed possess acceptable psychometric properties.

Against the above background, the Chinese Family Assessment Instrument (C-FAI) was developed by Shek (2002). There were three steps in the scale development process. First, an extensive literature review on the attributes of "healthy" or "optimal" families was conducted. The second step was to examine how Chinese people look at healthy families. Based on the data collected from adolescents and their parents (Shek, 2001), results showed that Chinese parents and their children regarded the absence of conflict, interpersonal harmony, mutuality, connectedness, and positive parent-adolescent relationship as important attributes of a happy family, and they were less likely to mention emotional expressiveness and communication as attributes of a happy family. Based on the literature review and empirical study, 33 items were eventually developed to assess adolescents' perception of family functioning. For each item, the respondent has to decide whether his/her family resembles the situation described in the item on a five-point scale. The 33 items in the C-FAI can be categorized into four areas: (a) mutuality (e.g., mutual support among family members), (b) communication and connectedness (e.g., family members talk to each other, not much barrier among family members), (c) conflict and harmony (e.g., frequent fighting among family members), and (d) parent–child subsystem quality (e.g., parents love their children, parental control too harsh). There are 11, 5, 7, and 10 items in these areas, respectively.

To evaluate the psychometric properties of the C-FAI, three studies were conducted by Shek (2002). In Study 1, results showed that the C-FAI was internally consistent at Time 1 and Time 2, and the tool was temporally stable. Besides, the C-FAI scores were significantly correlated with measures of trait anxiety, existential well-being, life satisfaction, and sense of mastery at Time 1 and Time 2, giving support for the construct validity of the test.

In Study 2, the reliability and validity of the C-FAI were examined in a clinical group and a nonclinical group. Both groups differed significantly on C-FAI scores, thus establishing the differential validity of the measure. Besides, results also showed that the C-FAI scale was internally consistent in both groups and C-FAI scores were significantly correlated with other measures of family functioning and individual psychological well-being, suggesting that the C-FAI had acceptable convergent and construct validities in clinical and nonclinical samples.

In Study 3, the reliability and validity of the C-FAI were examined in a sample of 3,649 adolescents randomly selected from secondary schools in Hong Kong by the multiple stage stratified random sampling method. The findings showed that the C-FAI scale was internally consistent in different adolescent samples. Besides, the C-FAI scores were significantly correlated with measures of general psychological symptoms, existential well-being, life satisfaction, and sense of mastery, thus providing further support for the construct validity of the test.

Regarding the factor structure of the C-FAI, Shek (2002) carried out exploratory factor analyses to understand the dimensionality of the scale. Consistent with the conceptual model of the scale, five basic factors, including mutuality, communication, conflict and harmony, parental concern, and parental control, were extracted.

These factors were also found to be stable in different subsamples based on gender, grade, and random assignment. Shek and Ma (2010) further examined the factor structure of the C-FAI based on the same dataset using confirmatory factor analyses. Results showed that there are five dimensions of the C-FAI (communication, mutuality, conflict and harmony, parental concern, parental control), which are subsumed under two higher-order factors (family interaction and parenting). Evidence of factorial invariance in terms of configuration, first-order factor loadings, second-order factor loadings, intercepts of measured variables, and intercepts of first-order latent factors was found.

In another study, Siu and Shek (2005) examined the factor structure and reliability of the C-FAI in a convenient sample of 1,462 adolescents from junior secondary schools in Hong Kong. Confirmatory analysis and coefficients of factor congruence showed that the five-factor solution obtained in this study was largely similar to previous validation studies and the factors had good internal consistency. These studies show that the C-FAI is an objective measure of Chinese family functioning with high factorial validity.

In another longitudinal study, findings based on the first year revealed two observations regarding the psychometric properties of the abridged version of the C-FAI (Shek & Ma, 2011). First, the scale was found to be internally consistent in different samples. Second, consistent with the predictions based on different theories, while the abridged C-FAI scale scores were positively related to parenting measures (including parental control, responsiveness, and demandingness) and positive youth development measures, they were negatively related to parental psychological control. Besides, C-FAI scores were negatively related to adolescent risk behavior. These findings provide support for the construct validity of the abridged version of C-FAI. Based on the data collected from the second year of this longitudinal study, similar findings supporting the internal consistency and construct validity of the C-FAI were also found.

Cross-References

- Chinese Culture
- Family Functioning and Well-Being
- Family Quality of Life

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Chinese Family Quality of Life

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Synonyms

Chinese family quality of life (QOL)

Definition

Despite the existence of different definitions of quality of life in the literature, there is general agreement among researchers that the concept is a multidimensional one, including material well-being (e.g., finance and income), physical well-being (e.g., health and personal safety), social well-being (e.g., personal relationships and family quality of life), emotional well-being (e.g., satisfaction and beliefs), and productive well-being (e.g., competence and productivity). Unfortunately, one drawback of the existing definitions of quality of life is that the focus has traditionally been placed on individuals rather than families and there is a lack of validated measures of family quality of life. There is also a general lack of research on Chinese families (Shek, 2006b).

With particular reference to the construct of family quality of life, Shek (2008) suggested that there are two levels on which the construct can be conceptualized. The first level is quality of dyadic family processes which include husband-wife marital quality (e.g., marital satisfaction, marital conflict), intergenerational relational qualities (e.g., grandparent-grandchildren conflict), parenting qualities (e.g., responsiveness, demandingness, behavioral control, psychological control), parent–child communication, and parent–child relationship qualities (e.g., trust and satisfaction with the parent–child relationship). The second level is quality of systemic family processes defined by different family functioning models such as overall family climate (e.g., cold or warm), communication patterns, emotional expressiveness, respect for individual members, mutual care and concern, conflict, leadership, family rules, family cohesion, and family adaptability.

Description

Measures of Chinese Family Quality of Life

With reference to the growing emphasis on family intervention and the rising demand for family assessment tools in different helping professions, there is a strong urge to develop objective assessment tools on family life quality in different cultures. However, a survey of the literature shows that there is a severe lack of objective measures of family quality of life in different Chinese contexts and this unfortunate situation has hindered the development of appropriate family interventions in different Chinese communities (Shek, 2010). Some of the translated and indigenously developed dyadic and systemic family quality of life measures are reviewed in this section.

Measures of Dyadic Family Life Quality

Some work has been done to translate and validate Western measures of marital quality in the Chinese culture. Shek (1994, 1995b) showed that the Chinese version of the Dyadic Adjustment Scale (C-DAS) had good internal consistency, criterion-related validity, construct validity, and factorial validity. Exploratory factor analyses revealed that the C-DAS had a factor structure similar to that of the original English version. Based on confirmatory factor

analyses, Shek and Cheung (2008) reported that four factors were abstracted from the C-DAS (dyadic consensus, dyadic cohesion, dyadic satisfaction, and affectional expression) and these four primary factors were subsumed under a second-order dyadic adjustment factor. Invariance of the factorial structure between men and women was also found. The findings suggest that the dimensions of marital adjustment assessed by the Dyadic Adjustment Scale can be replicated in the Chinese culture, although some minor refinement might be needed.

Besides, several studies showed that the Chinese version of the Kansas Marital Satisfaction Scale had good reliability and validity status (Shek, Lam, Tsoi, & Lam, 1993b; Shek & Tsang, 1993). Shek, Lam, Tsoi, and Lam (1993a) also translated the Marital Comparison Level Index (MCLI). Research findings showed that the scale was internally consistent and the scale scores were able to discriminate people with different marital status (i.e., criterion-related validity); the Chinese MCLI also showed convergent and discriminant validities.

Work has also been done to translate and validate Western measures of dyadic family quality of life within the parent–child dyad. Some prominent examples include the Chinese Paternal and Maternal Psychological Control Scales (Shek, 2006a), Chinese Parental Treatment Scale (Shek, 1995a), and Chinese Parenting Style Scale (Shek, 1999). Besides, researchers have conducted studies to develop and validate indigenous measures of dyadic family quality of life. For example, based on indigenous Chinese parental control concepts, Shek (2007) developed the Chinese Paternal Control Scale and the Chinese Maternal Control Scale. As predicted, these scales were internally consistent and the related scores had significant relationships with measures of psychological control, parental expectations, firm parental discipline, and perceived parental endorsement of traditional Chinese parenting beliefs.

Measures of Systemic Family Quality of Life

Several translated measures of systemic family quality of life have been developed. Shek (2001b) showed that the Chinese Self-Report Family Inventory possessed adequate reliability and validity. However, contrary to the previous findings that there are five to six dimensions of the original Self-Report Family Inventory, factor analyses revealed that two stable factors (family health and family pathology) were abstracted from the scale. Based on the findings of a series of studies, Shek (2002b) presented data supporting the internal consistency, concurrent validity, discriminant validity, and construct validity of the Chinese version of the Family Assessment Device (FAD) in different adolescent samples. In contrast to the proposal that there are seven dimensions in the FAD, three stable factors could be extracted from the Chinese FAD. Finally, Shek (2002c) showed that the Chinese Family Awareness Scale (C-FAS) was temporally stable and internally consistent. There was also support for the concurrent and construct validities of the scale.

To take into account of the attributes of the Chinese culture, Shek (2002a) developed the Chinese Family Assessment Instrument (C-FAI) based on a thorough literature review and qualitative data analyses. The study showed that the C-FAI possessed good internal consistency, test-retest reliability, criterion-related validity, and construct validity. Both the exploratory factor analysis and confirmatory factor analysis showed that there are five dimensions of the measure – communication, mutuality, conflict and harmony, parental concern, and parental control. Multigroup confirmatory factor analyses showed that there are five dimensions of the C-FAI (communication, mutuality, conflict and harmony, parental concern, parental control), which are subsumed under two higher-order factors (family interaction and parenting). Evidence of factorial invariance in terms of configuration, first-order factor loadings, second-order factor loadings, intercepts of measured variable, and intercepts of first-order latent factor was found (Shek & Ma, 2010).

Quality of Family Life in the Chinese Culture

A survey of the literature shows that different terms have been used to define "optimal," "healthy," or "normal" families. Although the

notion of "healthy family" is widely researched in the West and different family functioning models are proposed, there are comparatively fewer studies on "healthy" or "well-functioned" families in the Chinese contexts. With roughly one-fifth of the world's population, there is a need to understand the nature of Chinese families (Hsiao & Van Riper, 2010; Shwalb, Nakazazva, Yamamoto, & Hyun, 2010).

With particular focus on the traditional Chinese culture, there are several interesting features intrinsic to traditional Chinese families. First, because harmonious social order was strongly emphasized in Confucian thoughts, harmony in the family was encouraged and conflict between family members was prohibited in traditional Chinese families. In addition, calmness and harmony in both the Buddhism and Taoism thinking also reinforced the importance of harmony in traditional Chinese families. The traditional emphasis on the importance of family harmony is exemplified by the popular sayings of "yi he wei gui" (harmony is golden) and "jia he wan shi xing, jia shuai kou bu ting" (if a family lives in harmony, everything will prosper; a family will wither if there are a lot of quarrels).

Second, to achieve harmonious social order, behavior of family members was regulated by well-defined duties, obligations, and rules. In traditional Chinese families, family members were assigned to their proper positions with an objective to maintain domestic harmony. With reference to the "five cardinal relations" (wu lun), Chinese wives were taught to be submissive to their husbands (e.g., "chu jia cong fu" – when a woman gets married, she should obey her husband) and children were socialized to obey their fathers (e.g., "fu ming nan wei, bu gan bu cong" – one should not disobey father's orders). In fact, an ideal family in the Confucian thoughts is one that is characterized by "fu ci zi xiao, xiong you di gong" (the father is affectionate and the son is dutiful; the elder brother is friendly and the younger brother shows respect). Children in the traditional Chinese culture were usually socialized to perform proper roles and to treat collective interest to be more important than individual interest.

Third, because expression of individual emotions and views would easily create interpersonal tension and conflict, expression of self and emotion was de-emphasized in the traditional Chinese culture. As a result, children in the traditional Chinese culture were not trained and encouraged to openly express one's emotions, particularly the negative ones. Children were also discouraged to argue with their parents. Family members were trained to forbear and have self-restraint in order to maintain peace of the group. In addition, direct confrontation was avoided as far as possible to maintain harmonious interpersonal relationships. In fact, the use of forbearance ("bai ban ren nai" – to use all forbearance) and self-suppression in dealing with family issues were emphasized in the traditional Chinese culture. Besides Confucian thoughts, Buddhist and Taoist teachings, which emphasized self-suppression and balanced emotional life, also reinforced the importance of emotional inhibition in the traditional Chinese culture.

Finally, there was a strong emphasis on the traditional Chinese culture that family members in different generations should live together (i.e., patrilocal emphasis). In addition, there was a strong emphasis on family solidarity, such as bringing honor to the family and not to disgrace its good name, and continuation of the family name. Based on the above discussion, it is possible to conjecture that traditional Chinese people would regard absence of conflict, presence of interpersonal harmony, emotional suppression, enactment of proper role behavior by family members, and family cohesion as the characteristics of an "ideal" family. In this connection, it can be hypothesized that direct and open communication was de-emphasized in the traditional Chinese culture.

However, with gradual modernization and industrialization in different Chinese societies (such as Hong Kong and mainland China), it is reasonable to expect that perceptions of Chinese people of the attributes of an optimal family are influenced by traditional Chinese values as well as modern Western ideas. To understand Chinese people's perceptions of a "happy"

family, Shek (2001a) recruited Chinese parents ($N = 416$) and their adolescent children ($N = 412$) to give their views on the attributes of happy families via individual interviews. Based on content analyses of their narratives, three categories of attributes emerged from the data, including those related to: (a) the family as a whole, (b) the parent–child subsystem, and (c) the husband-wife subsystem. Results showed that Chinese parents and their children regarded absence of conflict and harmony as important attributes of happy families and they were less likely to mention emotional expressiveness and communication as attributes of happy families. The findings suggest that Chinese people's perceptions of happy families are closely related to traditional values in the Chinese culture. Chuang (2009) also described transformation and change in parenting style in Chinese societies.

There are few studies examining the quality of family life in different Chinese communities. The available findings are generally not conclusive. For example, with reference to Hong Kong, while the research commissioned by the Central Policy Unit and Census and Statistics Department of the Government of the Special Administrative Region suggests that people in Hong Kong are generally satisfied with the their family lives, findings based on the Social Development Index revealed that there has been a substantial drop in family cohesion in the last two decades (Chua, Wong, & Shek, 2010). There are also research findings showing that while Chinese adolescents were generally satisfied with their families, they expressed problems and issues regarding communication with their parents.

Impacts of Family Quality of Life on Emotional Quality of Life

There are studies showing that family quality of life is intimately related to emotional quality of life of Chinese people, including adults (e.g., midlife) and adolescents (Shek, 2004). With specific reference to Chinese adolescents, several conclusions were drawn as follows:

Conclusion 1: Positive parenting styles were related to better adolescent adjustment.

Conclusion 2: Higher parental behavioral control (e.g., monitoring, expectations) was associated with better adolescent developmental outcomes.

Conclusion 3: Higher parental psychological control (e.g., not respecting the child) was associated with poorer adolescent developmental outcomes.

Conclusion 4: More positive parent–child relational qualities (e.g., mutual trust) were associated with better adolescent developmental outcomes.

Conclusion 5: Higher parent-adolescent conflict was related to poorer adolescent adjustment.

Conclusion 6: Positive parent-adolescent communication was related to better adolescent adjustment.

Conclusion 7: Positive parental marital quality was related to better adolescent emotional quality of life.

Conclusion 8: Better family functioning was related to positive adolescent development.

Conclusion 9: Relative to mothers, fathers exerted a stronger impact on the development of Chinese adolescents.

Conclusion 10: Family influences exerted a stronger impact on adolescent girls than on adolescent boys.

Conclusion 11: The impact of family processes on adolescent developmental outcomes was found in families with and without economic disadvantage.

Conclusion 12: Many "adolescent problems" are in fact reflections of "family problems."

Discussion

With gradual Westernization in different Chinese communities, quality of family life has transformed substantially. In particular, adoption of the open door policy and economic reforms in China since the late 1970s have placed Chinese families, which have deep roots in traditional Chinese cultural values and Chinese Socialist thoughts, under the strong influences of Western cultural values, market economy, and

globalization. Against this background, it is obvious that more research on Chinese family quality of life should be carried out. There is also a strong need to develop validated family quality of life measures in the Chinese culture.

To what extent is the value of conducting Chinese family quality of life research? For skeptics about social science research, they may argue that such research is basically window dressing and not really useful. However, for those who believe in evidence-based social policy and service implications, there are at least two reasons why Chinese family research should be conducted. First, Chinese family research can demystify myths about Chinese families and enhance our understanding of the related phenomena. For example, Shek (2008) argued that the traditional notion of "strict father, kind mother" in the traditional Chinese culture has changed to "strict mother, kind father" in the contemporary society. Second, Chinese family research can enable policy makers to understand the needs of Chinese families. For example, how the implementation or non-implementation of minimal working hours may affect the quality of family life is an important question to be addressed.

Shek (2006b) highlighted several puzzles intrinsic to Chinese family research which are also relevant to the quality of life research in Chinese families. These puzzles included the use of quantitative versus qualitative approach, cross-sectional versus longitudinal study, simple versus complex statistical analyses, local versus comparative research, intuitive versus validated assessment tools, assessment based on single perspective versus multiple perspectives, and indigenous versus imported family concepts and theories.

Cross-References

- ▶ China, Quality of Life
- ▶ Chinese Culture
- ▶ Chinese Values
- ▶ Family
- ▶ Family Quality of Life

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Chinese Family Quality of Life (QOL)

► Chinese Family Quality of Life

Chinese Health-Promoting Lifestyle Profile

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Synonyms

Chinese HPLP; HPLP II; Taiwanese women

Definition

The Chinese health-promoting lifestyle profile (Chinese HPLP) is an instrument which measures different dimensions of healthy behaviors in Chinese populations.

Description

Healthy lifestyles significantly impact aging and health-care expenditure in aging societies. Cross-cultural evidence has shown that healthy practices in earlier life can effectively delay and/or prevent many chronic medical conditions in later life (Cicconetti et al., 2002). Women comprise the largest segment of the global elderly population; maintenance of women's healthy lifestyles can therefore significantly offset global health spending. Health promotion is particularly important for middle-aged women, because healthy behaviors such as regular exercise and stress management can effectively reduce the severity of physical transitions and health problem (Moriyama et al., 2008). A reliable instrument for the measurement of healthy lifestyles is, therefore, essential to understanding and addressing the health promotion needs of middle-aged women.

The health-promoting lifestyle profile II (HPLP II) is an instrument that has been widely used to measure health-promoting lifestyles in western healthy populations and clinical disorder groups. The original English HPLP II is a 52-item instrument that measures health-promoting behaviors on six subscales: health responsibility (nine items), physical activity (eight items), nutrition (nine items), spiritual growth (nine items), interpersonal relations (nine items), and stress management (eight items) (Walker, Sechrist, & Pender, 1987).

Lo (2009) conducted a study using a Chinese HPLP which was translated from the original English HPLP II to measures the healthy lifestyle among Taiwanese middle-aged women ($n = 137$). Lo and Wong (2011) conducted a secondary data analysis to examine the preliminary psychometric properties of the Chinese HPLP. The initial confirmatory factor analysis

(CFA) used a six-factor measurement model. It showed alignment with the original English version of the HPLP II, excepting the factor loading of item 50 in the nutrition subscale. This item was excluded from the second CFA. The CFA of the revised 51-item Chinese HPLP yielded a good estimate of fit ($x^2 = 4.509$, df = 5, p = 0.479, AGFI = 0.956, NFI = 0.991, RMSEA = 0.001). Correlations between the revised Chinese HPLP and the six subscales ranged from 0.74 to 0.87. All factors were significantly loaded on their respective latent factors (0.674–0.846). All Cronbach's α values indicated that the revised instrument had satisfactory internal consistency. All 51 items showed a linear relationship to the corresponding subscales. Criterion-related validity was indicated by significant correlations with concurrent measures of perceived health status and quality of life. The total instrument and perceived health showed a highly significant and fair relationship, as did the total instrument and quality of life. Similarly, the total instrument and financial status showed a highly significant and fair relationship. However, the total instrument and educational level showed a weak relationship but still positive and significant.

Discussion

The six-factor structure of the Chinese HPLP produced by the CFA was consistent with the original English HPLP II, excepting one item. This lack of correlation in the nutritional subscale may be due to the small sample size of the original study ($n = 137$). The correlations between the Chinese HPLP, quality of life, and perceived health were similar to those of the original instrument. The internal consistencies of the total Chinese HPLP and its subscales were similar to those demonstrated by the original English version among older adults (Callaghan, 2003). Furthermore, the positive relationships we found between the Chinese HPLP, financial status, and educational level are consistent with the results of other studies (Gulbeyaz et al., 2008; Frank, Stephen, & Lee, 1998). However, the correlations with educational level were relatively weak, which may indicate that this factor is not a good measure of healthy lifestyle among Taiwanese women. Therefore, it is suggested that future studies of the concurrent validity of the Chinese HPLP include cognitive-perceptual factors, such as self-efficacy, that independently predict healthy lifestyles (Beal, Stuifffbergen, & Brown, 2009).

Lo and Wong's study is limited by small sample size ($n = 137$). However, Barrett and Klines (1981) found that a subsample of 112 could recover the original factor structure with 90 variables. MacCallum, Widaman, Preacher, and Hong (2001) obtained 100 % convergent recovery of population factor structure with a subsample of 60 and 20 variables. Therefore, it is suggested that the minimum subject-to-variables ratio of 5:1 may not be valid for factor analysis. Instead, good factor recovery may be obtained with a small sample size, exhibiting high communalities of variables and overdetermination of factors (MacCallum et al., 2001; Velicer & Fava, 1998). In Lo and Wong's study, over half of the sample (137 women, 51 variables) showed high communality (≥0.68). The six-factor measurement model also had a reasonably high overdetermination of factors (number of items: number of factors = 51:6). It is thus confident that the sample size was sufficient to build the specified factor structure.

While the original English HPLP II has been widely used to measure healthy women's behavior in western society (e.g., Adams, Bowden, Humphrey, & McAdams, 2000; Lee, 2009), Chinese women have received little attention. It is therefore essential to validate a healthy lifestyle instrument that measures Chinese women's healthy behavior, which will allow cross-cultural comparison with published results from other populations. From a cultural perspective, the validation of the questionnaire among Chinese women is important, because traditional filial culture requires them to focus on family life; good wives and mothers are expected to provide direct care to older family members and to prepare nutritious and favored family meals. It is thus believed that understanding lifestyle patterns among Taiwanese women may provide important information about health promotion needs in their families. The positive results of Lo and Wong's study for the reliability and validity of the Chinese

HPLP provide a foundation for further, larger-scale investigation of this instrument as a culturally appropriate tool to assess the healthy lifestyles of Taiwanese women.

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Chinese HPLP

► Chinese Health-Promoting Lifestyle Profile

Chinese Medicine and Yang Sheng

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Synonyms

Cultivating life; Health preservation; Longevity and Chinese medicine; Nourishing life in China

Definition

Yang sheng is a core component of traditional Chinese medicine (TCM) that puts paramount emphasis on prevention of illnesses. The Chinese words *yang* refers to nourishing, nurturing, nursing, taking care of, fostering, or promoting and *sheng* means life, birth, growth, vitality, and health. Putting together, *yang sheng* refers to nourishing life, fostering health and well-being, and pursuing longevity (Chen, 2011). According to the definition in

a recent textbook "Life-Nurturing Science in TCM" published by the People's Medical Publishing House, a major Chinese academic publisher in healthcare topics, *yang sheng* is "the type of subjective and objective pro-health behaviors with which people take care of their life consciously through various means and methods, with reference to their understanding of the universal law of life and nature. It is also a health maintenance and health promotion activity achieved through mind/body unification" (Liu & Ma, 2007). The goals of *yang sheng* are achieved through a combination of abstentions and exercises in daily life. Through persistent, disciplined practices, one can preserve and develop the life-forces in the body; maintain and protect health; prevent diseases; live a balanced, properly regulated life; and achieve longevity. Sometimes, *yang sheng* is translated to English as health preservation, life cultivation, or life nourishment.

Description

Yang sheng is an integral part of TCM practice, which strongly emphasizes on health enhancement as a strategy in preventing and treating diseases. According to the theories of TCM, three elements are precious for human body to keep alive and healthy: essence (*jing*), vital energy (*qi*), and spirit (*shen*). *Essence* is the most fundamental substance to form the human body and the substantial foundation for growth and functional activities. According to the source of essence, it can be sorted into innate essence and postnatal essence. The former comes with birth originating from parents and is a primary substance for the formation of life. The latter essence is produced after the birth which originates from food, air, and the nutrient substances. While *essence* is conceptualized as substance, *qi* is conceptualized as energy, non-substance. *Essence* and *qi* mutually synthesize each other. With root on *essence*, *qi* activates and regulates the functions expressed by *essence*. Thus, *qi* may be seen as a fundamental motive power for life activity. It is represented through movement and activity in general, as well as by the functions of the different organs, blood circulation, digestion, breathing, etc. *Spirit* dominates people's consciousness and mental activities. Similar to *qi*, *spirit* has to base on *essence*, the fundamental substance. On the other hand, *spirit* also regulates the functions of *essence*. When *essence* is sufficient, human body is strong, thus leading to vigorous *spirit*, while the decline of *essence* leads to weakness of human body which will result in lassitude and insufficiency of *spirit*. *Qi* can generate *spirit*, and *spirit* can guard *qi*. *Essence* is the substantial foundation of *qi*, and *qi* expresses the vitality of *essence*. In a nutshell, *essence* is the substantial foundation of life, *qi* is power for life, and the *spirit* is the dominator. Sufficient *essence*, plentiful *qi*, and prosperous *spirit* are essential for assuring the vitality of life. The three cannot be separated, but should normally be in dynamic, harmonious relationships (Liu & Ma, 2007). If any of these three elements become deficient, vitality as a whole is diminished and both the constitutional and functional aspects of the organism (*essence* and *qi*) are affected. When physical and functional degeneration progress too far, they may give rise to signs of spiritual deficiency and thus affecting the *spirit*. This is how the three aspects of vitality interact and complement each other. Therefore, to maintain health and promote longevity, we must take integrative measures to preserve and nourish our *essence*, maintain the vitality of our *qi*, and support the positivity of our *spirit*.

TCM generally sees an illness as the struggle between two forces: the body's internal positive *qi* and the external disease agents. With sufficient internal positive *qi*, the external disease agents normally can hardly lead to development of the disease. When the internal positive *qi* is weakened, a person will be at high risk when exposing to the disease agents. In preventing and treating diseases, TCM considers nourishing the internal positive *qi* as more fundamental, although dealing with the external disease agents can also be important.

Life is about balance and harmony. Chen examined the concept of health in the paradigm of TCM and summarized that

> In TCM system, good health is the result of harmony with the heaven, earth and humanity. To be harmonious with the heaven, we need to be humble, and to observe and respect the laws of nature. For example, we should change clothing and adjust to the environment to synchronize with different climates or seasons. Otherwise, our body may be invaded by wind, damp, cold or heat qi and become sick. To be harmonious with the earth, we need have a balanced diet, and restrain ourselves from any excessive consumption of the five tastes (sour, sweet, salty, bitter and spicy - TCM considers all foods or tastes the combination of these five basic tastes). Otherwise, our body will lose balance, and develop illnesses such as obesity, heart disease and diabetes. To be harmonious with our fellow humans, we need to adjust or constrain the five negative emotions - complaining (blame), hate, sorrow (annoyance), anger, anxiety (worry or fear) so that we can get along with others peacefully. (Chen, 2011)

According to TCM theories, the most critical factor of effective treatment is to find the optimal balance between two opposing actions: fighting against the pathogenic agent and reinforcing the innate vitality and natural defenses. Chinese medicine takes account of both aspects of treatment: the direct struggle against the illness and the reinforcement of the body's own capacity to resist. As the illness recedes, natural healing is allowed to take place, and further treatments primarily aim to reinforce vitality (Riviere, 2011).

Yang sheng is a practice accessible to all people to cultivate health and harmony through daily activities. It focuses on maintaining balance through an awareness of our connection to nature, to our own bodies, and to the spirit. The core belief is to strengthen the body, in particular, the healthy functioning of the *qi*, so as to prevent diseases at the first place. TCM considers maintaining the effective circulation of *qi*, a central technique in all longevity practices. From a systemic perspective, healthy *qi* functioning can bring about positive impacts on *essence* and *spirit*, and vice versa, and therefore leading to positive, spiral reactions and harmony in body-mind-spirit (Chen, 2011). Regarding the actual practices, the key modalities of *yang sheng* are cultivating spirit, adjusting diet, exercising the body, regulating the moods, adapting to the climate, adhering to regular daily life pattern, cultivating good hobbies, and developing virtues.

Health Preservation Through Diet

TCM consistently adopts a systemic, holistic perspective in dietary advice. The key consideration is not good versus bad but is on balance, harmony, and variety. Any *good* stuff, if overconsumed, is bound to be bad. On the other hand, any *bad* stuff, if insufficient, may also be undesirable. The balance and harmony is not only about the mix of food but is also about the interaction with the person's current internal systemic bias and external predicaments, such as geographical location and climate. Accordingly, the principles of health preservation through diet include:

(a) To eat a great variety of food such as cereals, meat, vegetables, and fruits for a wide range of nutrition elements. Cereals and vegetables should form the major part of a meal, with meat and fruit as supplements.
(b) To have a good mix of food according to food's flavors (sour, bitter, sweet, hot, and salty), attritions (cold vs. heat, or yin vs. yang), and categories (meat vs. vegetables). Food that is overly oily or spicy should be avoided.
(c) To take food regularly and in moderate amount.
(d) To eat fresh, cooked food and avoid uncooked food.

Health Preservation with Exercises

Many traditional Chinese physical exercises echo the thought of keeping dynamic balance between yin and yang, mind and body, and human beings and their natural environment. The popular ones include Taijiquan (also commonly called as taichi), Wu Qin Xi (the Five-Animal Mimic Boxing), Ba Duan Jin (the Eight Pieces of Brocade), and Yi Jin Jing (Tendon Transformation Classic). According to the theories of TCM, the principles of traditional physical exercises are:

(a) A combination of motion and stillness is emphasized. In picking the right physical

exercise, one must consider his/her abilities and limitations, preferences, and physical condition.

(b) The exercise should be regularly, persistently practiced.

(c) The level of physical exercise is generally recommended at mild to moderate level.

(d) With due consideration of individual's ability, the level of physical exercise may be increased gradually.

(e) According to the Yin-Yang Theory, it is desirable to perform physical exercise early in the morning. For some people, this may not be practical; performing physical exercise at other time of the day is acceptable.

Health Preservation by Medical Herbs

In the paradigm of TCM, herbal medicine is an important means to nourish life, preserve health, prevent diseases, and achieve longevity. According to the theories of TCM, human body's longevity depends on the balance of yin and yang and qi and blood. The critical point of health preservation by medical herbs lies in the regulation of yin-yang balance. Broadly speaking, deficiency syndrome manifests as deficiency of qi, blood, yin, or yang, and excess syndrome manifests as stagnation of qi, blood, phlegm, or food. Medicinal herbs can be used to replenish what is deficient, dispel the pathogens, and purge the excess. They can activate qi for those with qi stagnation, promote blood flow for those with blood stasis, resolve dampness for those with excessive dampness, and resolve phlegm for those with phlegm accumulation. Some herbs may be used singly, but most herbs are used together with other herbs to form a formula. Many classic formulas have a history of over a thousand years, and their properties have been extensively tested through real-life clinical applications.

Health Cultivation Through Spiritual Cultivation

In the TCM regimen, as the notions of consciousness, feeling and thought are referred to as *shen* (meaning spirit or mind), which is considered to be stored in the heart and to govern all the activities of the organism. And thus, a sound *shen* is considered to be the basis of health and longevity, while weakness of *shen* is the main cause of illness and premature aging. The activities of *shen* are broadly classified as emotional (i.e., changes of mood and the seven emotions: joy, sorrow, anger, worry, panic, anxiety, and fear) and mental (i.e., consciousness and thinking) (Yuan & Liu, 1993; Yin, Zhang, Zhang, Zhang, & Meng, 1994). Since the *shen* plays vital role in governing life and commanding all the physiological functions of the body, TCM puts great emphasis on spiritual cultivation in health preservation. The regulation of heart, mind, spirit, and sentiment and the cultivation of virtue and conduct are the keys to avoid emotional disturbance, disorder of *qi* movement, imbalance of *yin* and *yang*, and attack of disease (Liu & Ma, 2007; Yuan & Liu, 1993). In TCM, spiritual cultivation pays much attention to the following: (1) cultivating the mind, (2) cultivating the virtue, and (3) regulation of emotions. An account of these methods is given in the following:

Cultivating the Mind. According to the ancient Chinese writings of Laozi, Zhuangzi (both were the key founders of Daoism over 2000 years ago), and the medical classics of *Huang Dei Nei Jing*, cultivating the mind is to keep the mind in the interior and thus achieving a state of quiet mind: the mental state being peaceful, free from excessive desires and distracting thoughts, and unaffected by external changes (Liu & Ma, 2007). This state of tranquility contributes to the harmony of the *zhang-fu* (i.e., organs) and helps maintain the smooth circulation of *qi*, resulting in good health and longevity. According to the *Health Preserving Skills Developed by Taishang Laojun*, an ancient writing on health preservation, a quiet mind can be cultivated by minimizing egoism and personal desires (e.g., the ancient book entitled pointed out six harmful elements to health preservation, including desires for fame, sex, wealth, delicious food, unrealistic fantasies, and jealousy) (Yuan & Liu, 1993).

Cultivating the Virtue. Cultivating a positive character, or virtue, is considered an

indispensible component of *yang sheng*. A close relationship among virtue, health, and longevity has been consistently proposed by ancient Chinese scholars, in particular, the Confucian school (Liu & Ma, 2007). The impacts of virtue cultivation on health are likely mediated through multiple mechanisms, including positive changes on mental state, lifestyle, and social relationships (Liu & Ma, 2007; Yuan & Liu, 1993a). Broad-mindedness refers to a good mental state characterized by large heartedness and good tolerance, according to Confucius. Being broad-minded allows us to face challenges and setbacks with a quiet mind, motivates us to look on the bright side, and reflects on the deeper meaning of life (Yuan & Liu, 1993b).

Regulation of Emotions. Moods or emotions are the comprehensive responses of human nature in the course of living. Adopting a systemic perspective, TCM theory holds that emotions are closely related to internal organs and extremity of the seven emotions may impair the internal organs, especially the corresponding organs, and thus causes illness (Yuan & Liu, 1993b). For examples, excessive anxiety impairs spleen, sadness and worry impair the lungs, fear impairs kidney, and, among all, excessive anger is regarded as the most harmful to people's health, which results in the impairment of the heart, stomach, the brain, the thorax cavity, and primarily impairing the liver (Liu & Ma, 2007). That is why timely adjustment to emotions is an integral part of health preservation. In TCM, adjustment to emotions could be achieved by exercising self-control (i.e., restraining), by providing direct (e.g., crying when in sorrow, loud crying when in pain) and/or indirect outlets for emotions (i.e., venting) (e.g., seek consolation from friends/relatives), by diverting one's attention (i.e., transferring) (e.g., taking a walk when afflicted by troubling thoughts), by persuasion (i.e., cognitive reframing, in modern days term), or by suppression of an emotion with another basing on the Five Elements Theory (a theory depicting the dynamic relations among the five meta-categories: wood, fire, Earth, metal, and water).

Health Preservation Through Regular, Harmonized Daily Life

According to the *Huang Dei Nei Jing*, a regular, harmonized daily life is essential to health and longevity (Yuan & Liu, 1993a). The general principles are the following: (1) conforming to the circadian order, (2) cultivating good sleep habits, (3) having proper exercises, and (4) adhering to a moderate dietary regime. The importance of having proper exercises and a moderate dietary regime were discussed previously. The following gives an account of the importance of conforming to the circadian order and cultivating good sleep habits.

Conforming to the Circadian Order. A rational arrangement of work and rest is very important to ensure good health. According to the *Huang Dei Nei Jing*, it is clear that the growth, exuberance, and decrease of *yang qi* in the body reflect the circadian order in the natural environment in which we are living in. In order to be in harmony with the nature, the activities of the human body should comply with this circadian rhythm (Yuan & Liu, 1993a). For examples, we should wake up at sunrise, work during daytime, and take rest during the nighttime. In addition, the *Huang Di Nei Jing* emphasizes on the importance of avoiding overstrain and over-rest. TCM theory holds that overstraining the *shen* results in its premature deprivation, which is detrimental to health preservation. On the contrary, over-rest causes stagnation of the circulation of *qi* and blood, which is also detrimental to health preservation.

Cultivating Good Sleeping Habits. Health preservation practice in TCM emphasizes on the importance of the cultivating good sleep habits, including the preparations to bed, the physical arrangement of the bedroom and bedding, the time and posture during sleep, and also the exercise to perform after waking up. For examples, the book "The Knacks in Sleep" by Cai Jitong (of the Song Dynasty, AD 960–1279) recommends keeping a calm mind and eating lightly before bed, while others advise doing mild form of exercise (such as walking a thousand steps) before going to bed. All these measures promote quality sleep at night. Stimulant drinks and

vigorous activities should be avoided as they will cause difficulty in falling asleep (Yuan & Liu, 1993b).

Health Preservation Through Recreation

Cultivating various interests and hobbies in leisure time is an important element of health preservation. TCM theory states that through various kinds of healthy, graceful recreational activities, one would facilitate the circulation of *qi* and blood (Liu & Ma, 2007). In Chinese culture, the "four graceful interests" are music playing (*Qin*), chess playing (*Qi*), calligraphy (*Shu*), and painting (*Hua*), while other self-enhancing interests include dances, gardening, and travelling. The following gives a brief account of the "four graceful interests" because they are of vital importance in enriching people's life and in cultivating the mind.

Music (Qin) and Dance. *Qin* originally refers to a traditional ancient Chinese string instrument. It also refers to music appreciation in general sense. *Jiao*, *Zhi*, *Gong*, *Shang*, and *Yu* are the five notes in traditional Chinese music, and they served different functions. The note *Jiao* is gentle and peaceful, and it helps lift depressive moods and relieve insomnia; *Zhi* is passionate, which helps refreshing the individuals and facilitates the circulation of *qi* and blood flow; *Gong* is melodious, which strengthens the spleen and improves appetite, while *Shang* is solemn which helps contain anger and the note *Yu* is tender, which cultivates creativity and enlightens the mind (Liu & Ma, 2007). Music is often associated with dance in the Chinese culture. Dance helps exercise one's joints; facilitate the circulation of *qi* and blood, which helps strengthen the physique; improve digestion; refresh the body from fatigue; and drive away illness (Liu & Ma, 2007). Accompanied by music, dancing helps alleviate negative moods and relive tensions. Both music and dance serve the function to free a person from entangling emotions (Yuan & Liu, 1993b).

Chess (*Qi*). The art of chess playing requires patience, planning, and an open mind to adapt to the unpredictable. With the complexity of a chess game, the adept player needs to be calm and concentrated, a process by which people learn to be magnanimous and to cultivate a virtuous attitude towards life (Liu & Ma, 2007). Further, chess playing requires the dedication of mental efforts, and thus it helps activate neurological functioning, increase blood flow to the brain, and exercise one's intellectual ability (Yuan & Liu, 1993b).

Calligraphy (Shu) and Painting (Hua). Chinese calligraphy and painting are traditional arts of the Chinese. A skilled calligrapher or painter adjusts his or her posture into an upright stance in order to concentrate, purify the mind, listen to the body, and visualize each character before starting to write. As the calligrapher moves the brush, his or her energy penetrates into or even through the paper. This process, to a large extent, mirrors *Qigong* practice (Wu, 2005). In addition, there is a saying in Chinese calligraphy, "*Yi Zai Bi Xian*" meaning "mind before the brush," that is, one should purify the mind before writing. Therefore, in TCM theory, the practice of calligraphy and painting helps refine the *shen* and strengthen the physique. Appreciation of calligraphy and also enriches one's interests and nurtures the development of good temperament.

Cross-References

- ▶ China, Quality of Life
- ▶ Chinese Culture
- ▶ Community Festivals
- ▶ Confucianism
- ▶ Health Promotion

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Chinese Parental Control Scale

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Definition

The Chinese Parental Control Scale is an indigenously developed measure that assesses parental control in Chinese parents using indigenous Chinese concepts.

Description

Conceptualization and Assessment of Parental Control

In the field of family research, parental control has been considered as an important dimension of parenting which significantly influences child developmental outcomes. Traditionally, control versus autonomy was used to describe parenting characteristics (Becker, 1964; Schaefer, 1959). However, as this approach might not be able to depict the complex nature of parent–child relations, several types of parental control such as psychological control and behavioral control were proposed (Barber, 1996, 2002; Steinberg, 1990). Behavioral control is defined as the "rules, regulations and restrictions that parents have for their children" (p. 563, Smetana & Daddis, 2002). Psychological control refers to a parenting style that pertains to the manipulation of a child's thoughts, feelings, and emotions in an intrusive manner (Barber, 1996; Steinberg, 1990).

While the concept of parental control (particularly behavioral control) has been widely studied in the West, little attention has been paid in Chinese contexts. Besides, although there are some translated measures of parental control, few attempts have been carried out to examine Chinese parental control using indigenous Chinese concepts. Research on Chinese parents is important because there is evidence that parental control and its consequences might not be the same as those observed in Western societies (Chao, 1994).

Shek (2001) highlighted several features intrinsic to traditional Chinese families, including a harmonious and conflict-free intergenerational atmosphere, "five cardinal relations" (*wu lun*), and strong emphasis on family solidarity. Under the influence of the traditional Chinese culture, several characteristics of parental control were identified (Shek, 2007). First, elements of psychological control are intrinsic to Chinese parenting practice. These include the demand for absolute obedience of the child, emphasis of the faultless nature of parents, unconditional respect for the parents, and intrusiveness of parents in the socialization process. This notion could be shown in the Chinese saying of *fu yao zi*

si, zi bu neng bu si (if a father wants the child to die, the child cannot have the option of not dying). Second, Chinese parents had high expectations about their children, especially their sons. This could be reflected in the cultural belief of *wang zi cheng long* (wishing the son to be a "dragon," i.e., the child high above other people) and *hu fu wu quan zi* (a strong father does not have a weak son). Lastly, Chinese parents believed that strict and firm discipline particularly via punishment was the only way to monitor their children to adhere with the familial and society expectations. This could be reflected in the Chinese belief of *bang xia chu xiao zi* (a filial son is the product of the rod). A review of the "family handbooks" in the traditional Chinese culture showed that there was a strong emphasis of family rules (*jia gui*) and how children should be punished under different circumstances (Shek & Lai, 2000). Furthermore, fathers were expected to play the role of teachers to supervise the children to ensure that they behave well, such as *yang bu jiao, fu zhi guo* (it is the fault of the father if he only raises the child without teaching him).

Given the emphasis on parental authority and child obedience in the traditional Chinese culture, it is argued that psychological control (expectation of total obedience of the child) and behavioral control (high expectation and strict discipline) were the dominant features of Chinese parental control and it had an important impact on the children's development.

The Chinese Parental Control Scale (CPCS)

Based on indigenous Chinese cultural beliefs, Shek (2007) developed a 12-item self-report measure assessing parental control in Chinese fathers (the Chinese Paternal Control Scale – CPCS) and mothers (the Chinese Maternal Control Scale – CMCS). Indigenous Chinese parenting concepts, such as maturity (*sheng xing*), obedience (*guai* and *ting hua*), absence of family teaching (*wu jia jiao*), and parental teaching (*jiao xun*), are used. The total score of the items in each scale was used as an indicator of the degree of parental control based on Chinese concepts, with a higher score indicating a higher level of Chinese parental control.

In a sample of 3,017 Chinese adolescents, Shek (2007) found that the CPCS and CMCS were internally consistent. These results were further replicated in different subsamples (i.e., male and female groups). Consistent with the theoretical predictions, the CPCS and CMCS scores were strongly related to psychological control, parental expectations, and strict parental discipline; both scales had only weak relationships with parent–child relational qualities and psychological well-being. Furthermore, the findings showed that psychological control moderated the relationships between Chinese parental control measures and parent–child relational qualities as well as psychological well-being. Utilizing a longitudinal dataset with junior secondary school students as participants, Shek (2008c) similarly found that the CPCS and CMCS were reliable and significantly correlated with other measures of parental control and perceived parental endorsement of traditional Chinese parenting beliefs in early adolescent years. Also, both scales had weak concurrent and prospective relationships with parent–child relational qualities measures, and the observed relationships were moderated by parental psychological control. In short, these cross-sectional and longitudinal findings provide support for the reliability and validity of the measures.

Shek (2008b) further studied the effects of parent gender, child gender, and grade level on the relationship between parental control and parent-adolescent relational qualities. In line with the theoretical predictions and previous research studies (Shek, 2007, 2008c), the findings suggested the need to change the traditional notion of "strict fathers, kind mothers" to "strict mothers, kind fathers" in the contemporary Chinese culture. As predicted, results revealed that there were parent gender and child gender differences in parental control and parent-adolescent relational qualities, and levels of perceived parental behavioral control assessed by these two indigenous scales gradually declined from grades 7 to 9.

Utilizing a 3-year longitudinal research design, Shek (2008a) examined differences in family quality of life and psychological

well-being among adolescents with different experiences of economic disadvantage. Consistent with the findings in the Western literature, poverty exerted a negative impact on parental control. In particular, the adverse effects were found in Chinese fathers, but not in Chinese mothers. These results highlighted the influence of the gender of the parents when studying the effects of economic disadvantage on family quality of life in Chinese families. Lastly, based on the longitudinal data collected from a large sample of Chinese adolescents, Shek (2008d) examined the effects of the parents' marital status on family process across time. In line with the prediction, perceived parental control assessed by indigenous Chinese concepts was poorer in non-intact families as compared to those in intact families over time.

In conclusion, there is evidence supporting the reliability and validity of the CPCS and CMCS. Research findings show that indigenous Chinese concepts of parental control were closely related to measures of behavioral control and psychological control developed in the Western literature.

Cross-References

- ▶ Chinese Culture
- ▶ Family Quality of Life
- ▶ Parenting Style
- ▶ Quality of Life

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Chinese Parental Psychological Control Scale

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Definition

The Chinese Psychological Control Scale is a measure that assesses parental psychological control in Chinese parents.

Description

Conceptualization of Parental Psychological Control

In the literature on parenting, two types of parental control are identified: behavioral control and psychological control (Barber, 1996, 2002; Steinberg, 1990). Behavioral control refers to parental behaviors that attempt to control or manage a child's behavior through rules and regulations, whereas psychological control refers to a parenting style that pertains to manipulate the child's thoughts, feelings, and emotions in an intrusive manner (Barber, 1996; Smetana & Daddis, 2002; Steinberg, 1990). According to Smetana and Daddis (2002), parental psychological control refers to "parents' attempt to control the child's activities in ways that negatively affect the child's psychological world and thereby undermines the child's psychological development" (p. 563). In view of the intensification of parenting issues and parent–child relational problems, parental psychological control has been a focus of attention in family research in the past two decades.

Barber and Harmon (2002) outlined the higher-order attributes (e.g., covert and indirect control of the child, intrusiveness, and hostility) and lower-order features (e.g., manipulative, constraining, excessive parental expectations, and affective punishment) of psychological control. Some examples of psychological control features include constraining verbal expression (e.g., the parent interrupts when the child attempts to express ideas), invalidating feelings (e.g., the parent criticizes the child when the child expresses feelings), personal attack (e.g., the parent blames the child for the family's problem), guilt induction (e.g., constantly reminding the child about the parent's sacrifice), love withdrawal (e.g., the parent threats to withdraw love if the child does not obey), and erratic emotional behavior (e.g., the parent vacillates between caring and attacking parental behavior).

Research findings have clearly shown negative relationships between psychological control and child development (Barber, 1996; Barber, Stolz, Olson, Collins, & Burchinal, 2005). Psychological control was solely linked with negative child behaviors, such as externalizing and internalizing problem behaviors (Conger, Conger, & Scaramella, 1997; Kirshnakumar, Buehler, & Barber, 2003; Nelson & Crick, 2002). Despite its detrimental effects on child's self and social development, there has been a paucity of research on factors related to psychological control. Barber (1996) noted that "although psychological control was included in some of the earliest conceptualization of parenting and continues to be implicit in much of the major work, focused attention to the construct has been lacking" (p. 3298). He further highlighted that "there is little research specifically measuring psychological control and its covariates" (p. 3313).

There are several limitations intrinsic to the existing research findings. First, most of the studies examining psychological control and adolescent adjustment assessed primarily maternal psychological control or "aggregated" paternal and maternal control. As paternal parenting is different from maternal parenting, it is important to examine paternal and maternal psychological control separately. Second, as a majority of the psychological control research findings is based on cross-sectional data, little is known whether these findings remain unchanged across time. Finally, most of the existing studies on parental psychological control were conducted in the Western contexts with very few studies conducted in non-Western contexts.

With reference to the Chinese culture, Shek (2005) noted that the topic of psychological control was under-researched and that there was no validated self-report measure of psychological control among Chinese adolescents. Shek (2006a) highlighted several elements of psychological control intrinsic to Chinese parenting practice. These include the demand for absolute obedience of the child, as exemplified by the saying *fu yao zi si, zi bu neng bu si* (if a father wants the child to die, the child cannot have the option of not dying), and strong emphasis on filial piety, as shown in the saying *bai xing xiao wei xian* (among all acts of a person, filial piety is the most important one). Also, Chinese parents strongly emphasize severe punishment,

as reflected by the saying, *bang xia chu xiao zi* (a filial son is the product of the rod), and faultless nature of the parents, as revealed in the saying, *tian xia wu bu shi zhi fu mu* (there is no faulty parent in this world). Lastly, cultural beliefs such as *wang zi cheng long* (wishing the son to be a "dragon" – high above other people), *hu fu wu quan zi* (a strong father does not have a weak son), and *yang er yi bai sui, chang you jiu shi nian* (if one raises a child for 100 years, one has to worry about the child for 90 years), reflecting that excessive parental expectation and fostering dependency of the child on the parents, were intrinsic to traditional Chinese culture.

The Chinese Parental Psychological Control Scale (CPPCS)

Based on an extensive review of the literature, Shek (2006a) developed a 10-item self-report measure assessing psychological control in Chinese fathers (the Chinese Paternal Psychological Control Scale – CPPCS) and Chinese mothers (the Chinese Maternal Psychological Control Scale – CMPCS). These items assess the basic features of psychological control, including invalidating personal feelings and experiences, constraining verbal expression, personal attack, love withdrawal, and excessive control.

The internal consistency reliability, construct validity, and discriminant validity of the CPPCS and CMPCS were examined in a sample of 3,017 Chinese adolescents (Shek, 2006a). The CPPCS and CMPCS were found to be internally consistent based on the total sample and different subsamples (i.e., male and female groups) results. Convergent validity of these scales was supported by (a) positive relationships between the CPPCS and CMPCS and perceived parental endorsement of traditional Chinese parental beliefs and (b) negative relationships between the CPPCS and CMPCS and measures of psychological well-being, parent–child relational qualities, and parental knowledge. In addition, discriminant validity of the two scales was also supported by the presence of a weak relationship between psychological control measures and parental monitoring. Similar results were found in the longitudinal data set of the same study (Shek, 2006b). The relationships between parental behavioral control (i.e., parental knowledge, demandingness, monitoring) and parental psychological control were low, thus providing further support of the discriminant validity of the two measures. Regarding the effects of psychological control on the quality of parent–child relationship, Shek (2006c) found that parental psychological control exerted a negative influence on parent–child relational qualities (i.e., readiness to communicate with parents, mutual trust between parent and child, and qualities of parent–child relationship).

Based on a sample of 2,758 Chinese adolescents, Shek (2007) further conducted a longitudinal study and examined the relationship between perceived parental psychological control and psychological well-being (i.e., hopelessness, mastery life satisfaction, and self-esteem) over time. Results showed that parental psychological control was concurrently related to adolescent psychological well-being at Time 1 and Time 2. These results were further found in both gender groups. Consistent with the theoretical predictions, parental psychological control predicted mastery and life satisfaction. In particular, paternal psychological control (Time 1) significantly predicted changes in life satisfaction (Time 2). Conversely, this relationship was not found in maternal psychological control. On the other hand, maternal psychological control (Time 1) significantly predicted changes in self-esteem (Time 2), but this predictive effect was not shown in paternal psychological control.

In another longitudinal study, findings based on a sample of 3,328 adolescents further supported the convergent validity of the two measures (Shek & Ma, 2011). First, the relationship between parental psychological control and parental monitoring was significant. Second, parental psychological control was negatively associated with life satisfaction but positively related to hopelessness. Lastly, consistent with previous findings, inverse relationships were found among parental psychological control, parent–child relational qualities, and family functioning. It is important to note that all aforementioned relationships remained stable after a year.

Cross-References

- Chinese Culture
- Family Quality of Life
- Parenting Style
- Quality of Life

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Chinese Parenting Behavior Scale

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Definition

The Chinese Parenting Behavior Scale (CPBS) assesses Chinese adolescents' perceptions of paternal and maternal parenting styles in terms of responsiveness and demandingness. It comprises a 20-item Paternal Parenting Style Scale (PPS) and a 20-item Maternal Parenting Style Scale (MPS).

Description

Assessment of Parenting Behavior

To understand variations in the ways parents use to interact with their children, Baumrind (1971) proposed the authoritative-authoritarian-permissive typology of parenting. Based on this conceptualization, Maccoby and Martin (1983) developed a

fourfold scheme of parenting styles with acceptance and responsiveness as one axis and demand and control as the other axis to delineate four types of parenting styles – authoritarian, authoritative, neglectful, and indulgent parenting. In this classification, authoritative parenting is responsive and demanding, neglectful parenting is unresponsive and undemanding, authoritarian parenting is demanding but unresponsive, and indulgent parenting is responsive but undemanding. This classification of parenting styles has been widely adopted in clinical work, education, and research across cultures.

Based on the framework of Maccoby and Martin (1983), Lamborn, Mounts, Steinberg, and Dornbusch (1991) developed 19 items to assess adolescents' perceptions of parenting behavior. The scale consists of two factors: (1) parental responsiveness (acceptance and involvement), with 10 items assessing the extent to which the adolescents perceive their parents as loving, responsive, and involved and (2) parental demandingness (strictness and supervision), with 9 items assessing the adolescents' perceptions of parental monitoring and supervision. Both subscales were found to have high internal consistency, and they were moderately intercorrelated. However, there are several limitations of this study. First, neither the factor structure of the scale nor stability of the dimensions intrinsic to the scales was examined. Second, as the subject of examination in the scale is "parents" (i.e., aggregated parental behavior), it is difficult to understand the uniqueness of paternal and maternal parenting behavior. As such, there is a need to develop separate measurements of paternal and maternal parenting behavior and to look at their psychometric properties. Third, as the scale was tested among high school students studying from grade 9 to grade 12, its applicability to early adolescents deserves further examination. Finally, because the scale was developed and tested in the Western contexts, its generalizability to Chinese settings is questionable.

In the traditional Chinese culture, the saying "strict father, kind mother" (Wilson, 1974) may pose some conjectures on the differences between Chinese paternal and maternal parenting styles in the dimensions of responsiveness and demandingness because fathers were commonly conceived as harsh and demanding disciplinarians whereas mothers were conceived to be affectionate and responsive (Ho, 1987). However, this traditional belief has been challenged, and the view of "strict mother, kind father" has been put forward in contemporary Chinese culture, as Chinese mothers were found to be more authoritative than Chinese fathers (Shek, 2008b). Therefore, it is important to look at parenting behavior in Chinese fathers and mothers separately. Unfortunately, there are few validated measures of Chinese parenting (Shek, 2010).

The Chinese Parenting Behavior Scale (CPBS)

The Chinese Parenting Behavior Scale (CPBS) comprises a 20-item Paternal Parenting Style Scale (PPS) and a 20-item Maternal Parenting Style Scale (MPS), which measures Chinese adolescents' perceptions of specific parenting behavior of their fathers and mothers in terms of the dimensions of responsiveness and demandingness. Nineteen items were translated and modified from the parenting style scale of Lamborn et al. (1991), and one item (he/she takes initiative to understand my situation at school) was added (Shek, 1999a). Similar to the design of Lamborn et al. (1991), some items are measured in a true-or-false format, some are on a three-point Likert scale, and some ask participants to choose one among four or five response categories that best describing their situation. The total score of the items in each scale was used as an indicator of the level of paternal and maternal parenting styles, with higher scores representing more positive parental attributes.

In a longitudinal study on parenting and adolescent psychological adjustment (Shek, 1999a, b), the PPS and MPS were administered to 387 early adolescents at two points of time with a year apart. Results of exploratory factor analyses showed that two factors could be extracted from the PPS (paternal responsiveness, 13 items, and paternal demandingness, 7 items) as well as from the MPS (maternal responsiveness, 13 items, and maternal demandingness, 7 items). The factor structure of the

responsiveness and demandingness dimensions was highly congruent for the PPS and MPS at each time point and was moderately to highly stable across time. Such factor structure was consistent with the findings of Lamborn et al. (1991), except two items measuring parents' initiation to know and actual knowledge about their child's leisure time activities loaded on parental responsiveness factor, which were originally proposed to be items assessing parental demandingness. The findings generally suggest that responsiveness and demandingness are two basic constructs of parenting behavior, though there are some cultural differences in interpreting some parenting behavior as a sign of responsiveness or demandingness.

The reliability of these scales was supported in different samples of Chinese adolescents. Results of reliability analyses showed that the PPS and MPS and their subscales (paternal responsiveness: PPS-R, paternal demandingness: PPS-D, maternal responsiveness: MPS-R, and maternal demandingness: MPS-D) were internally consistent among a group of early adolescents at different times (Shek, 1999a, b) and among another group of adolescents with larger sample size over three consecutive years (Shek, 2006, 2008a, b, c). Further analyses also showed that the scale was stable over time (Shek, 2008a). Moreover, an abridged version of the PPS and MPS with nine identical items in each scale was also found to have adequate internal consistency among a group of early adolescents from economically disadvantaged families (Shek, 2005).

The construct validity of the scales was demonstrated in multiple studies. For instance, the PPS-R, PPS-D, MPS-R, and MPS-D were found to be positively related to parenting treatment in the aspects of concern and harshness (Shek, 1999a), and the related constructs were positively correlated with life satisfaction, self-esteem, and purpose in life but negatively associated with hopelessness and general psychological morbidity among early adolescents (Shek, 1999b). Another study also showed that both PPS-D and MPS-D were significantly related with paternal and maternal behavioral control (in the aspects of knowledge, expectation, monitoring, and discipline) and paternal and maternal psychological control among early adolescents (Shek, 2006).

Consistent with various theoretical predictions, there is additional support for the concurrent validity of the scales in differentiating adolescents with different economic statuses (Shek, 2008a) and parental marital statuses (Shek, 2008c). Shek (2008a) found that both PPS-R and MPS-R could differentiate between groups of adolescents with and without economic disadvantage, and the PPS-R could further differentiate between adolescents in the transient economic disadvantage group and those in the prolonged economic disadvantage group. Although both PPS-D and MPS-D could not distinguish adolescents with and without economic disadvantage, the PPS-D could significantly differentiate adolescents of transient economic disadvantage group from those of prolonged economic disadvantage group (Shek, 2008a). In line with theoretical expectations, Shek (2008c) further found that the PPS-D could significantly distinguish adolescents growing up in families with different parental marital statuses, while MPS-D could significantly differentiate between intact families and non-intact families with remarriage and between non-intact families with and without remarriage. The findings were consistent with previous findings (Spruijt, de Goede, & Vandervalk, 2001) which provided support for the construct validity of the related measures.

In conclusion, all these findings have yielded strong evidence suggesting that the CPBS (PPS and MPS) is valid and reliable in measuring adolescents' perceptions of paternal and maternal parenting styles in Chinese culture.

Cross-References

- ▶ Chinese Culture
- ▶ Family Quality of Life
- ▶ Parenting Style

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Chinese Positive Youth Development Scale

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Definition

The Chinese Positive Youth Development Scale is an indigenously developed scale which attempts to assess different dimensions of positive youth development in Chinese adolescents.

Description

Positive Youth Development

One unique feature of adolescent psychology in the past few decades has been its focus on adolescent problems. As such, there are criticisms that this "pathological" approach has limited our understanding of the potentials of adolescents (Benson, 1997). Alternatively, under the positive youth development approach, there is an emphasis on the importance of strengths, competencies, and thriving of young people which can be strengthened by developmental nutrients, assets or support, and opportunities. Given the positive youth development perspective and asset promotion paradigm, the scope of adolescent development is viewed from a broader perspective and in a more holistic manner than the traditional approach (Benson, Mannes, Pittman, & Ferber, 2004; Damon, 2004; Scales, Benson, Leffert, & Blyth, 2004).

In the past few decades, programs have been developed in North America to promote positive youth development. Catalano, Berglund, Ryan, Lonczak, and Hawkins (2002) reviewed 77 programs on positive youth development and

found that only 25 programs were successful. Based on the successful programs, the following 15 positive youth development constructs were identified:

Promotion of bonding: relationship with healthy adults and positive peers

Cultivation of resilience: enhanced capacity for adapting to change and stressful events in healthy and adaptive ways

Promotion of social competence: strengthening of interpersonal skills and providing opportunities to practice such skills

Promotion of emotional competence: emotional maturity and management

Promotion of cognitive competence: development of cognitive skills and thinking

Promotion of behavioral competence: cultivation of verbal and nonverbal communication and taking action skills

Promotion of moral competence: development of a sense of right and wrong

Cultivation of self-determination: promotion of a sense of autonomy

Development of self-efficacy: promoting coping and mastery skills

Promotion of spirituality: development of purpose and meaning in life, hope, or beliefs in a higher power

Promotion of beliefs in the future: developing of future potential goals, choices, or options

Development of clear and positive identity: promotion of healthy identity

Recognition for positive behavior: developing systems for rewarding

Provision of opportunities for prosocial involvement: designing activities and events for program participants to make positive contribution to groups

Fostering prosocial norms: encouraging program participants to develop clear and explicit standards for prosocial engagement

The Chinese Positive Youth Development Scale (CPYDS)

Shek, Siu, and Lee (2007) pointed out that there are several problems related to the assessment of the construct of positive youth development. The first problem is that there are wide variations in the related definitions (Roth, Brooks-Gunn, Murray, & Foster, 1998). The second problem is that although there are many available indicators of adolescent developmental outcomes, effort to develop positive youth development indicators is not widespread. The third problem is that there is a lack of a single instrument in which different dimensions of positive youth development are included. Finally, most of the discrete measures of positive youth development were developed in the West, and related comprehensive Chinese measures are almost nonexistent (Shek, 2010). Even though there are some measures of positive youth development in the Chinese culture, few measures have been derived from validation studies.

Against the above background, Shek et al. (2007) developed and validated a comprehensive scale, entitled the Chinese Positive Youth Development Scale (CPYDS), to assess positive youth development. Based on the model of Catalano et al. (2002), there are 15 subscales in the CPYDS, including bonding (6 items), resilience (6 items), social competence (7 items), emotional competence (6 items), cognitive competence (6 items), behavioral competence (6 items), moral competence (6 items), self-determination (5 items), self-efficacy (7 items), spirituality (7 items), beliefs in the future (7 items), clear and positive identity (7 items), prosocial involvement (5 items), prosocial norm (5 items), and recognition for positive behavior (4 items). A contrasted group design was used to validate the CPYDS, including adolescents with well adjustment ($N = 162$) and adolescents with poor adjustment ($N = 160$). Besides the CPYDS, measures of thriving, life satisfaction, and perceived academic performance were included as positive measures, and scales assessing substance abuse, delinquency, and behavioral intention to engage in problem behavior were used as measures of problem behavior.

Several findings on the psychometric properties of the CPYDS were reported by Shek et al. (2007). First, the related findings provide support for the internal consistency of the CPYDS and its subscales. Second, the two

groups differed in term of CPYDS subscales and total scores in the predicted direction, providing support for the criterion-related validity of the CPYDS and its related subscales. Third, significant correlation coefficients of the interrelationships among the subscales of the CPYDS are consistent with the prediction which gives support for the construct validity of the measures. Finally, the CPYDS and its subscales were positively related to indices of thriving, life satisfaction, and perceived academic results. Furthermore, the CPYDS and its subscales were negatively related to substance abuse, delinquency, and behavioral intention to engage in adolescent high-risk behavior.

The dimensionality and factorial invariance of the CPYDS using multigroup confirmatory factor analyses (MCFA) were examined in 5,649 Secondary One students in the context of a positive youth development program (Shek & Ma, 2010). Results showed that there are 15 basic dimensions of the CPYDS which are subsumed under four higher-order factors (i.e., cognitive-behavioral competencies, prosocial attributes, positive identity, and general positive youth development qualities). Evidence of factorial invariance in terms of configuration, first-order factor loadings, second-order factor loadings, intercepts of measured variables, and intercepts of first-order latent factors was found. The findings suggest that the CPYDS has stable dimensions that can be used to assess positive youth development in Chinese adolescents.

There is further evidence supporting the construct validity of the CPYDS. Sun and Shek (2010) reported findings on the relationships among life satisfaction, positive youth development, and problem behavior in 7,975 Secondary One students recruited from 48 schools in Hong Kong. Consistent with the theoretical predictions, while different measures of positive youth development were positively related to life satisfaction, they were negatively related to adolescent problem behavior. Similar findings were found in the recent study by Sun and Shek (2012). Again, positive youth development measures were positively correlated with life satisfaction but negatively related to adolescent problem behavior.

In another longitudinal study, findings based on the first year revealed two observations regarding the psychometric properties of the abridged version of the CPYDS (Shek & Ma, 2011). First, the scale was found to be internally consistent in different samples. Second, consistent with the predictions based on different theories, while the CPYDS scale scores were positively related to parenting measures (including parental control, responsiveness, and demandingness) and perceived family functioning, they were negatively related to parental psychological control. Besides, CPYDS scores were negatively related to adolescent-risk behavior. These findings provide support for the construct validity of the CPYDS. Similar findings providing support for the internal consistency and construct validity of the CPYDS were found based on the data collected from the second year of the study.

In view of the paucity of research findings regarding instruments assessing psychosocial functioning in Chinese people (Shek, 2010), the development of the Chinese Positive Youth Development Scale enables Chinese family practitioners to assess positive youth development in Chinese adolescents in an objective manner. With the substantial increase in Chinese adolescents in North America, the scale is also valuable for family practitioners and allied professionals working with American and Canadian Chinese adolescents. In their review of the development of evidence-based practice in Hong Kong, Shek, Lam, and Tsoi (2004) pointed out that there was an urgent need to develop more objective outcome measures in different Chinese communities. Obviously, the present attempt is a constructive response to such suggestion. Furthermore, with the increasing demand for accountability and service effectiveness in human services, the development of the Chinese Positive Youth Development Scale can enable social workers and allied professionals to assess positive youth development in Chinese adolescents in a more systematic way, and the assessment results can assist them to further design relevant intervention plans and strategies.

Another implication of developing such a scale is that besides looking at the "problems" and "deficits" of young people, it would be equally important to examine the "strengths" and "potentials" of adolescents. Obviously, the development of the Chinese Positive Youth Development Scale can assist social workers to do the job in a more efficient and competent manner. Nevertheless, the fundamental issue that should be addressed is whether we can have a more holistic view about adolescents by looking at their strengths and positive development. In other disciplines such as psychology and psychiatry, there is a growing emphasis on looking at the strengths of the clients and examining how such strengths may contribute to the wellness of the clients.

Cross-References

- ▶ Chinese Culture
- ▶ Positive Youth Development
- ▶ Project P.A.T.H.S. (Promotion of Quality of Life in Chinese Adolescents)
- ▶ Quality of Life

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Chinese Rituals

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Definition

Chinese rituals refer to a set of actions commonly practiced in Chinese communities, usually performed at either major ▶ life events such as birth, wedding, and funeral or certain points in the cycle of seasons. They serve mainly to symbolize familial, social, or cosmic order prescribed by traditional ▶ Chinese culture or encapsulate indigenous ways of coping with everyday life, or both.

Description

Chinese rituals follow a cultural tradition which dates back to the Zhou dynasty (1046–256 B.C.) in the history of ▶ China. They are heavily influenced by indigenous culture, ▶ Confucian and Taoist philosophies, and later Buddhism as well. As a result, these rituals can be eclectic or syncretic, and people who practice them are not necessarily aware of their religious or philosophical borrowing. As in most other cultures, there are regional variations in how these rituals are actually performed; yet, they express a common set of cultural beliefs about how the society and the cosmos are structured and how best to cope with demands in everyday life. For brevity and relevance, the following discussion focuses on traditional rites of passage, calendrical rites, and rituals of everyday life in China.

From early on, Confucian thinkers were aware of the role and purpose of rituals in the society. One of the prominent scholars Zhu Xi (1130–1200 A.D.), in his liturgical text on domestic rites and ceremonies *Jia Li* (Family Rituals), wrote that rituals are to "preserve status responsibilities and give concrete form to ▶ love and respect" (Ebrey, 1991, p. 3). That is, ritual can be a tool for *preserving order* in the community and a conduit for collective *emotional expression*. Moreover, it serves as an effective mechanism of knowledge transmission in which measures of ▶ health promotion are passed down through generations. For example, in a Chinese funeral, the eldest son of the deceased sits next to the coffin to emphasize lineage, and choreographed outbursts of crying regulate the expression of grief. The burning of mourning clothes at the end of the ritual helps prevent the spread of infectious disease, a germane health concern in older time. Table 1 contains a brief summary of important Chinese rituals and their biopsychosocial functions.

In quality of life research, Chinese rituals have become the subject of numerous studies, which attempt to establish the links, or lack thereof, between particular rituals and health outcomes. There are a number of possible pathways through which rituals affect a person's well-being: Rituals may either encourage health-promoting or health-risk behaviors, regulate emotion expression in stressful situations, or improve spiritual well-being through participation of religious or cultural acts.

Space does not allow for an exhaustive review of the implications of Chinese rituals on different aspects of quality of life. Below is a selected review of some major areas of research, followed by a short account of the practice of traditional rituals in modern China.

Calendrical Rites

The yearly festival cycle presents numerous occasions for celebration within the household. Long being an agrarian culture, many of the calendrical rites in China are timed to the planting and harvesting cycle. A majority of the main festivals are determined by the Chinese calendar, while two (*Qingming* and Winter Solstice) are by a solar calendar. Many traditional Chinese festivals serve as an occasion for members of a family to gather in order to perform a common ritual, be it a feast or a group excursion to the countryside for tomb sweeping. The symbolic meaning of a festival can be multilayered. For example, the Mid-Autumn Festival is an occasion to both mark the fall harvest and celebrate the beauty of the full moon. It is also associated with the story of two figures in Chinese mythology, Houyi and Chang'e. Historically, the festival commemorates the uprising against Mongols during the Yuan dynasty (1280–1368 A.D.).

Regardless of the symbolism of these festivals, one of their functions is to strengthen familial bonds through shared, structured experience. These ritualized annual gatherings are important to the Chinese people, especially those in older generations. The phenomenon of death postponement, an observation that there are fewer deaths in the week immediately before a major festival and more deaths in the week after, has been reported in older Chinese people both in America (Phillips & Smith, 1990) and in China (Panesar & Goggins, 2009). Nonetheless, the effects calculated from these findings are small and subject to dispute.

Chinese Rituals, Table 1 Biopsychosocial functions of Chinese rituals

Rites of passage	*Preserve order*	*Express emotion*	*Promote health*	Calendrical rites
	gathering with extended family strenghens familial bond		*house cleaing on day before New Year's Eve* promotes hygiene	Lunar New Year
One-month celebration *(manyue)*	*celebration banquet* offcializes introduction of new family member	celebrates new life		
	tending to ancestor's grave venerates ancestors	reminisces the deceased	*excursion to countryside* helps avoid plague	*Qingming* (15th day from Spring Equinox)
Initiation *(guan)*	*(seldom practiced in modern China)*			
	honoring of Qu Yuan (340-278 BC), a Confucian poet celebrates patriotism		*wearing of herb pouch* protects against infectious diseases	*Duanwu* (5th day of 5th month)
Wedding rites *(hun)*	*betrothal gift-giving* signifies union of two families	*clebration banquest* expresses joy		
	family reunion dinner strengthens familial bond	expresses familial affection		Mid-Autumn (15th day of 8th month)
Postpartum rites *(zuoyue)*			*confinement and special diet* aids postpartum recuperation	
	tending to ancestor's grave venerates ancestors	reminisces the deceased	*hikes to mountain* helps avoid plague	*Chongyang* (9th day of 9th month)
Funeral rites *(sang)*	*seating of eldest son next to coffin* emphasizes lineage	*ritualized wailing* expresses grief in a sanctioned way	*burnig of mourning clothes* protects the bereaved from infections	
	family reunion dinner strengthens familial bond	expresses familial affection		Winter Solstice

Rites of Passage

Traditional classification of domestic rituals has four main categories: *guan* (initiation), *hun* (wedding), *sang* (funeral), and *ji* (ancestral rites). Of the first three life-cycle rites, *guan*, or coming-of-age capping, is rarely practiced in modern China. (It is still observed in variant forms in ▶ Korea and ▶ Japan, where the influence of Chinese culture remains salient.) Apart from these orthodox ceremonies, childbearing and childbirth rites are also an important part in the Chinese ▶ family.

Birth

One of the most discussed Chinese health practices in the academic literature is postpartum care. The practice of *zuoyue* (literally meaning "sitting the month") refers to a set of rituals that take place within the first month of childbirth (Pillsbury, 1978). In order to recuperate from the loss of "blood" (*xue*) and the imbalance of *qi* caused by pregnancy, the mother is expected to stay indoor for a month without bathing and washing her hair. Special diet including ginger soup and other "hot" food, believed to nourish the *yang* energy, is prepared for the mother, while female relatives of the extended family help take care of the newborn (a practice called *peiyue*, or "accompanying for the month"). Evidence remains inconclusive as to whether such ritualized confinement, with formalized social support and mandated rest, leads to better convalescence or protect mothers against postpartum depression (Wong & Fisher, 2009).

Death

▶ Death brings change to the ▶ family structure; a son becomes the household leader once his father dies. Chinese mourning rites are organized around this shifting of relations between the living and the dead (Ebrey, 1991). The living, through participation in highly formalized rituals,

usually under the assistance of religious professionals or "funeral specialists," help the deceased terminate their relationship with this world and aid their passage into the next. A funeral consists of a sequence of actions including notifying death by wailing, ritualized bathing of the corpse, and transferring money and goods to the dead through burning paper offerings (Watson, 1988). Punctilious execution of these elaborate steps is expected of the bereaved family, whose expression of grief is generally discouraged except during certain intervals at the funeral. The bereaved family is not expected to attend social events for a period of time, both out of respect for the deceased and for the belief that they bring bad luck to others.

These mourning rites are reported to be therapeutic for some because of its structured expression of grief, although they can pose undue emotional and financial burden on the bereaved family (Chan et al., 2005). It has been suggested that because of the extensive and elaborate rituals, Chinese people experience grief less as an individual and spiritual endeavor but rather as a communal experience. Contrary to their Western counterparts, deliberate avoidance of grief processing does not have maladaptive effects on bereaved family members in China (Bonanno, Papa, Lalande, Zhang, & Noll, 2005).

Rituals in Everyday Life

Rituals feature prominently in the everyday life of Chinese people as a means of self-help. Religious acts steeped in Taoist or Buddhist symbolism are performed at temples or at home to dispel bad fortune, cure physical ills, or seek emotional comfort.

Geomancy, Fortune-Telling, and Shamanism

Geomancy, or *feng shui*, is concerned with the optimal arrangement of natural elements (wood, water, fire, etc.) from which people can benefit in terms of better health or fortune. Some argue it is not pure superstition and probably encapsulates folk wisdom about the interdependence between the environment and people (Han, 2001), although consultations with *feng shui* masters are often driven by more utilitarian goals. In similar ways, fortune-telling is widely used as a means of coping with uncertainties in life, usually in the form of palm reading, face reading, or *qiu-qian*, a practice involving random drawing of bamboo sticks. Less popular, but still commonly practiced in Taiwan and among Hokkien Chinese communities in Southeast Asia, is shamanistic healing, an example of which is *ji-tong* (or *dang-ki* in Hokkien).

Many of the traditional superstitious practices are still commonplace in modern day China, even when business decisions are involved (Tsang, 2004). They are seen as culture-specific coping mechanisms that can alleviate anxiety with various levels of effectiveness. Anecdotal accounts of fortune-telling and shamanism suggest their usefulness as indigenous healing tools in the counseling and psychiatry literature (Lee, Kirmayer, & Groleau, 2010; Tang, 2007), although no empirical studies are available to date.

Ancestral Worship

The relationship between the living and the dead is said to be one of mutual dependence (Ebrey, 1991): The ancestors provide protection to the living, while the living offer prayers and sacrifices to them. Ancestral rites provide a structure through which the living ones venerate their ancestors. They can take the form of daily incense burning in front of the ancestral tablet (a common fixture in Chinese households) or more elaborate ceremonies involving the offering of food and the burning of paper crafts at the ancestor's tomb several times a year. A study of Chinese seniors living in Canada found the act of ancestral worship was associated with better family relationship (Chappell, 2005).

Health Promotion Rituals

Folk health promotion practices are often ritualized in Chinese culture. They originate from indigenous practices and borrow concepts from traditional Chinese medicine, according to which good health is achieved through maintaining an internal balance and adapting to environmental changes (Topley, 1976). Cultural representations of health (such as *qi*, or life energy, and the

yin-yang balance) are widely and almost uniformly held by Chinese people, including those living overseas. These concepts do not supplant but rather complement with Western biomedical notions of health (Lam, 2001; Gervais & Jovchelovitch, 1998); Chinese people tend to hold the belief that Chinese medicine tackles the "root" of a chronic health problem, while Western medicine is an effective tool for symptom relief. In a study of Hong Kong Chinese's health-seeking behavior pattern, an oscillation between consulting Chinese herbalists and seeing Western-style doctors was observed (Lee, R. P. L., 1980).

Food has considerable importance in health promotion in Chinese culture. Rituals of dietary manipulation are widespread among Chinese people, and there is an abundance of dietary prescriptions and proscriptions as treatment of or preventive measure against various ailments (Koo, 1984). Food is characterized by its quality on the continuum of "hot/cold" and "wet/dry." By judiciously consuming a balanced diet, an optimal state of homeostasis can be maintained inside the body. Conversely, excess intake of food of any particular quality disturbs the balance, resulting in ill health. It is not uncommon for patients who receive Western medical treatment to independently seek dietary manipulation as a means of coping and self-management (Simpson, 2003) or to believe that diet is responsible for their conditions (Choe et al., 2006).

Food as Cultural Symbols

Food also plays a prominent role in traditional ceremonies and rituals. Chinese people see culinary indulgence as a means of paying respect or showing care (Ebrey, 1991; Chang, 1977). Meat, cooked rice, and fruits are presented in front of ancestral tablets or deity statues as a form of worshipping. The offering of food to the ancestors and to the gods is an integral part of many celebratory events, so is the family feast that usually comes afterwards.

The practice of using food as tokens of affection extends to everyday life. Food preparation and consumption in the Chinese family can be seen as expressions of care and control. For example, a child who looks slightly thin is assumed to be inadequately fed, which to Chinese people signals lack of care on the parents' part. Case studies of anorexia nervosa patients in China reveal that the act of cooking and eating can be used to communicate conflicts and struggles within the family (Lee, S., 1995; Ma & Chan, 2004).

Practice of Traditional Rituals in Modern China

In the first decades since the founding of the ▶ People's Republic of China, traditional rituals had been disparaged by the government as "feudal superstitions" that ran against socialist ideals and outright proscribed during the Cultural Revolution (1966–1976) (Cheater, 1991). In contrast, the practice of rituals by Chinese people in ▶ Taiwan and ▶ Hong Kong (a British colony until 1997) was largely uninterrupted. Since then, state restrictions in mainland China on traditional practices were slowly replaced by a more welcoming attitude by the government, which begins to see rituals and customs as a moral corrective and a social cohesive. Today, many of the rituals are revived and openly practiced in China.

Political influences aside, socioeconomic change in Chinese societies since the 1970s significantly shapes the practice of rituals in modern China. For one, many of the more elaborate rites are either simplified or omitted due to the quickening pace of modern day life; for example, mourning rites nowadays no longer last for 3 years as prescribed by classical texts. Secondly, a steady trend towards commercialization is evident. Local customs are reconstructed and repackaged for tourist consumption, such as the revival of dragon boat races in southeastern Guizhou as a major sporting event (Oakes, 1997). Traditional festivals are reappropriated as business opportunities to boost consumer sales, and a culture of face consciousness in a nation of increasing wealth means that many of the passage rites, such as weddings and childbirth celebrations, are taken to new levels of lavishness. Funeral services in China, especially in urban areas, have turned into a professional industry which is faulted by some

for overcommercializing and preying on survivors' anxiety to sell expensive, highly elaborate ritual performance packages (Chan, Y. W., 2003; Chan & Mak, 2000). Third, while rapid Westernization in urban cities of China may have an impact on the younger generation's adherence to traditional rituals, it also gives rise to nationalistic sentiments among social elites, who through championing the reinstitution of former customs seek to revive the national identity against Western influences. Lastly, Chinese communities in Asia (e.g., Singapore) and overseas (e.g., United States) continue to practice traditional rituals under the confluence of other cultures. The evolution of rites and customs inside and outside China will continue to affect the quality of life of many who practice them.

Cross-References

- Chinese Culture
- Community Festivals
- Confucianism
- Family Structure
- Health Promotion
- Hong Kong, Quality of Life
- Japan, Quality of Life
- Life Events
- Love
- People's Republic of China
- Sense of Community
- Social Cohesion
- South Korea, Quality of Life

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Chinese SF-36

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Definition

The Chinese language versions of the SF-36 Health Survey, a proprietary 36-item, 8-scale general health status assessment tool with physical and mental health component summary measures.

Description

The SF-36 is a highly used instrument comprising of physical and mental health component summary measures based on eight subscales and one item measuring self-reported health transition (Ware, 2000). Physical health comprises the Physical Functioning, Role-Physical, Bodily Pain, and General Health subscales and mental health comprises the Vitality, Social Functioning, Role-Emotional, and Mental Health subscales. There are over 130 translations and English language adaptations of the SF-36, four of which are Chinese language versions (http://www.qualitymetric.com/Portals/0/Uploads/Documents/Public/QM_Catalog_2011.pdf). Written Chinese has two forms. Traditional written characters are used in ▶ Hong Kong, ▶ Taiwan, and Macao and simplified written characters in mainland China and Singapore. Also, there are multiple varieties of spoken Chinese and a variety of cultural backgrounds across the Chinese population worldwide. Therefore, it is not surprising that multiple versions of the Chinese SF-36 have developed and some items have been adapted to fit the Chinese cultural context.

Chinese versions of the SF-36 were developed using methodology based on the guidelines of the International Quality of Life Assessment (IQOLA) project (Ware, Keller, Gandek, Brazier, & Sullivan, 1995). The IQOLA procedure consists of three stages: translation, scale construction, and validations and norming (Ware & Gandek, 1998). The four Chinese versions were developed in the USA (Ren, Almick, Zhou, & Gandek, 1998), Hong Kong (Lam, Gandek, Ren, & Chan, 1998), Taiwan (Fuh, Wang, Lu, Juang, & Lee, 2000), and China (mainland) (Li, Wang, & Shen, 2003); all used a translation procedure based on IQOLA guidelines. A revised version of the Chinese (Hong Kong) SF-36 has also been published (Lam, Lam, Lo, & Gandek, 2008).

In addition to these most prominently used versions, other authors have undertaken their own Chinese translations of the SF-36 (Azen et al., 1999).

Translation and Idiomatic Equivalence

Ren et al. (1998) raised issues of idiomatic equivalence in their paper on the development of the Chinese (American) SF-36. Across versions of the Chinese SF-36, phrases for which idiomatic equivalence was not possible have been substituted with various Chinese phrases of similar meaning, for example, "liveliness, vigor" and "ready to work physically and spiritually" for "full of pep" in a Vitality item; "low in mood" for "down in the dumps"; and "sadness" for "downhearted and blue" in Mental Health items (Ren et al., 1998, Li et al., 2003). As "moderately" means "middle" in Chinese, the Chinese "somewhat" has been used as an alternative response choice (Lam et al., 1998).

"Mile" (1,609 m) and "block" as measures of walking distance related to the Physical Functioning scale have also been found problematic. "A mile" has been substituted with "one kilometer" (1,000 m) (Fuh et al., 2000; Ren et al., 1998) and "1,500 m" (Li et al., 2003). Furthermore, it has been suggested that mainland rural Chinese were likely to interpret "one kilometer" as "one li," the Chinese traditional unit of distance currently standardized at 500 m (Liu, Li, Ren, & Liu, 2010). There is no equivalent Chinese expression for "blocks," and mainland Chinese rural residents' villages do not typically have blocks (Liu et al., 2010). An alternative was "distance between two street crossings" (Li et al., 2003).

"Bowling" and "playing golf," descriptors for moderate activities in Physical Functioning scale items, are not common activities in Chinese populations (Ren et al., 1998). "Practicing Tai Chi" instead of "playing golf" (Lam et al., 1998; Li et al., 2003) and "mopping the floor" instead of "bowling" (Li et al., 2003) have been used as substitutes or complementary examples in versions of the Chinese SF-36.

Psychometric Properties

The Chinese versions of the SF-36 have been found to be generally psychometrically acceptable across a wide range of Chinese population groups. The percentage of missing data has been very low. However, some elements are problematic.

Floor and ceiling effects have been consistently reported across all Chinese versions of the SF-36; both floor and ceiling effects for Role-Physical and Role-Emotional and ceiling effects for Social Functioning, Bodily Pain, and Physical Functioning. It has been suggested that the observed high floor and ceiling effects for Role-Physical and Role-Emotional scales in particular may be due to the dichotomous format of these items (Leung et al., 2010). However, while reducing occurrence of floor effects and generally improving the psychometric properties of these scales, changing to a 5-point scale in version 2 of the Chinese (Hong Kong) SF-36 in line with version 2 of the original SF-36 (Ware, 2000) had little influence on Role-Physical and Role-Emotional ceiling effects (Lam et al., 2008). Additionally, large ceiling effects were present for Physical Function, Bodily Pain, and Social Functioning.

It has also been suggested that ceiling effects are to be expected in pain and role-functioning scales when participants are mostly healthy general population samples (Lam et al., 1998, 2008). However, ceiling effects for the Role-Physical and Role-Emotional scales have been reported in older stroke patients (Shyu, Lu & Chen, 2008), older adults with diabetes (Hu, Gruber, & Hsueh, 2010), patients with rheumatoid arthritis (Koh et al., 2006), psoriatic arthritis patients (Leung et al., 2010), and patients with myocardial infarction (Wang, Lopez, Ying, & Thompson, 2006).

The Vitality scale typically correlates with both physical and mental component summary scales (Ware, 2000). In Chinese versions the Vitality scale has been found to be strongly associated with mental health (Fuh et al., 2000; Ren et al., 1998; Tseng, Lu & Gandek 2003). Similar results were found for both English and Chinese SF-36 versions in a mixed Asian population (Thumboo et al., 2001), which suggests cultural differences may be a likely reason for this observation. In ▶ Chinese culture, vitality is associated

with mental condition (Fuh et al., 2000) and central to the concept of a healthy mental state (Wang et al., 2006), with being happy (an item in the Mental Health scale) considered a sign of vitality (Ren et al., 1998).

▶ Reliability and validity for the Social Functioning scale have typically been less than satisfactory and scale items often correlated more highly with the Vitality and Mental Health scales (Ren et al., 1998). Poor reliability of the Social Functioning scale has also been found for the English version of the SF-36 (Ware, 2000). However, there are possible culturally specific influences on this scale. For many Chinese, using health problems as an excuse to avoid work or family and social gatherings is culturally unacceptable (Jordan-Marsh, Cody, Silverstein, Chin, & Garcia, 2008; Li et al., 2003; Tseng et al., 2003a). It has also been suggested that a more distinct separation between the role of family and the role of friends and other groups in some Chinese communities in comparison to Western societies may limit the validity of the Social Functioning scale (Jordan-Marsh et al., 2008; Tseng et al., 2003a). In this regard, Tseng et al. (2003a) have suggested development of a specific family functioning scale for the Chinese SF-36.

In comparison with US norms, mean scores for General Health, Role-Emotional, and Mental Health scales were lower in mainland, American, and Hong Kong Chinese (Li et al., 2003). Other influences apart from worse state of health may have contributed to these differences. There is cultural reluctance of Chinese to rate their general health as excellent (Fuh et al., 2000; Lam et al., 1998). In an investigation of low-income Chinese American, low-income primary care patients only 3 % reported their health as "excellent" (Lubetkin, Jia, & Gold, 2003). Chinese are also more likely to choose responses in the middle of ▶ Likert scales (Lee, Jones, Mineyama, & Zhang, 2002).

Psychometric evaluations of the Chinese (mainland) version have typically been undertaken with urban populations. When examined in a rural population, a different factor composition, low ▶ test-retest reliability, and violation of clustering and ordering of item mean scores were observed (Liu et al., 2010). Semantics and different life expectations were suggested as possible important determinants of these differences (Liu et. al., 2010).

Bilingualism

Singapore has a policy of bilingualism with around 46 % of the population speaking English and Chinese (Singapore Department of Statistics, 2011). Thumboo and colleagues have extensively researched responses to the Chinese (HK) and English versions of the SF-36 in the Singapore population. In a large cross-sectional investigation (n = 2,711), Chinese-English bilingualism was found not to influence SF-36 scores (Thumboo et al., 2002a). However, questionnaire language did, with the use of English associated with higher scores than Chinese for General Health, Vitality, Role-Emotional, and Mental Health scales. In contrast, another study by the same authors (Thumboo et al., 2002b) using a crossover design (n = 168) only found a language effect for the Vitality scale, suggesting that data from English- and Chinese-speaking subjects could be pooled.

With the exception of Physical Functioning, bilingualism was not associated with scale variability, and the Chinese (HK) version had smaller variances than the English version in the Physical Functioning scale and physical component summary scores (Cheung et al., 2004). Based on observed larger effect sizes, compared to the English version, the sample size required when using the Chinese (HK) SF-36 may be smaller for physical component summary-based investigations (Cheung, Machin, Fong, Thio, & Thumboo, 2005). Bilingualism did not affect changes in Chinese (HK) SF-36 scores over 2 years in Singaporean ethnic Chinese (Thumboo et al., 2005).

Population Norms

Diversity across the Chinese population suggests the need for different ▶ norms for different populations (Fuh et al., 2000). Significant differences between urban, rural, and remote island elderly Taiwanese populations were found in most scales of the Chinese (Taiwan) SF-36, with the rural population having the poorest

health status (Tsai, Chi, Lee, & Chou, 2004). In contrast, although the profiles were similar, rural mainland Chinese appeared to have similar physical health, but higher mental health in comparison with urban mainland Chinese, (Liu et al., 2010).

Population norms have been presented for Hong Kong (Lam, Lauder, Lam, & Gandeck, 1999), Singapore (Thumboo, Chan, Machin, & Soh, 2002), Taiwan (Tseng, Lu, & Tsai, 2003b), Hangzhou, China (Li et al., 2003), and Shanghai, China (Wang et al., 2008). Wang et al. (2008) also provide a comparison of mean scale scores for American, Canadian, and various Chinese populations. Scoring algorithms for the Chinese (HK) version have been determined (Lam, Tse, Gandek, & Fong, 2005). However, differences in results obtained from these and the standard American algorithms were minimal and, using the standard algorithms, considered better for international comparisons (Lam et al., 2005).

Application

The Chinese SF-36 has been used as a measure of health status in general and specific population surveys, an indicator of quality of care and effectiveness of health services, as an outcome measure in clinical trials, and for the validation of disease-specific health status questionnaires.

Monolingual Chinese-speaking individuals in Canada and the USA are most likely to be elderly or new immigrant Chinese. Given that the SF-36 is a health status tool, it is perhaps not surprising that nearly all studies using the Chinese (American) SF-36 have been on elderly Chinese populations. The vast majority of these studies have been on Canadian elderly.

The Chinese (Hong Kong) SF-36 has been the most used Chinese version of the SF-36. This may be a reflection Hong Kong's population being around 95 % Chinese, having one of the highest per capita incomes in the world and supporting a productive health-related research community. Over 100 illness-related studies have used the Chinese (HK) SF-36, including over 20 randomized control trials. A small number of studies on Singapore and mainland China populations have also used this version.

Excluding psychometric and validation studies, the Chinese (mainland) SF-36 has been used in over 35 studies and the Chinese (Taiwan) SF-36 in over 30 studies. Interestingly, unlike other versions, the Chinese (Taiwan) SF-36 has been used in around the same number of studies on non-ill and ill populations.

Cross-References

- ▶ Ceiling Effect
- ▶ Chinese Culture
- ▶ Effect Size
- ▶ Floor Effect
- ▶ Happiness
- ▶ Hong Kong, Quality of Life
- ▶ Immigrants, an Overview
- ▶ Likert Scale
- ▶ Low Income
- ▶ Norms
- ▶ Psychometric Analysis
- ▶ Reliability
- ▶ Rural Seniors
- ▶ Taiwan
- ▶ Test-Retest Reliability
- ▶ Validity, Statistical

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Chinese Values

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Definition

There is a long history of intellectual interest in values that cuts across the disciplinary boundaries in social sciences (Kulich, 2009). Despite confusion over this concept, a broad consensus that serves to guide the recent empirical investigations, especially cross-cultural research, defines a value as "a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable, which influences the selection from available modes, means, and ends of action" (Kluckhohn, 1951, p. 395). Chinese values typically refer to a subset of values considered to have originated from and hence characteristic of Chinese culture and the communities of people associated with it (Bond, 1996).

Description

Broadly speaking, Chinese culture is considered the paragon of a collectivistic cultural system organized around a cluster of values related to relational orientation, group harmony, and respect for hierarchy. However, an opportune analysis of Chinese values requires clarifying the notion of values and the notion of Chinese, both of which defy simplistic explanations. First, even with a unifying conceptualization, values are multifaceted and multilevel; the immense breath of values research attests to the diversity of ways in which values are fitted to narrower conceptual nets. The pieces that contribute to the whole need to be treated separately. Second, the notion of Chinese is both ambiguous and complex (Hong, Yang, & Chiu, 2010), as there exist multiple Chinese groups and various environments occupied by them. Attention to both their similarities and differences is thus necessary for putting Chinese values in perspective.

Chinese Values as Multifaceted and Multilevel

There are three main ways in which values research can be distinguished, which partly determines the conclusions that can be drawn about Chinese values. They are levels of analysis, emic versus etic approaches, and explicit versus implicit measurements.

Levels of Analysis

Different levels of analysis refer to the distinction in Kluckhohn's definition of values that values can be either a property of an individual or that of a supra-individual entity. Although the notion of values residing within individuals is intuitive, large social entities such as institutions or nation states can also be said to carry values and hence function as socializing agents.

Supra-individual values can be extrapolated in at least two ways. One way is through aggregating individual responses to a higher unit of analysis, which is a common practice in the contemporary cross-cultural work of "dimensionalizing" culture. Other ways of operationalizing cultural levels of analysis consist of analyzing widely disseminated cultural products or assessing people's intersubjective perception of cultural values. Despite their differences, these methodological approaches are united in postulating value systems beyond and coexisting with the individual level.

Such a multilevel conceptualization of values underscores the necessity to posit Chinese values as operating at different levels as well. Clear cultural differences or cultural distinctiveness is more detectable at a higher level of analysis. Several multinational projects on values converge on the persistence of cultural groupings in terms of shared historical heritage such as the Confucian region that also includes Japan and South Korea (e.g., Inglehart & Baker, 2000); meta-analyses of comparing cultural products across cultures also reinforce Chinese culture as more collectivistic in

value orientation (Morling & Lamoreaux, 2008). On the other hand, values are less culturally rigid and more dynamic at the individual level (Oyserman, Coon, & Kemmelmier, 2002). Cultural differences measured at the individual level with the use of Schwartz's values survey are typically outweighed by both universal similarities and within-culture diversity (Fischer & Schwartz, 2011). The values people actually endorse can be dissociated from their representation of cultural values (Chiu, Gelfand, Yamagishi, Shteynberg, & Wan, 2010); although people generally agree on the prevailing cultural values, they may decide to identify with or dissent from them. The general point is that results are not necessarily consistent across levels of analysis but can potentially complement each other.

Emic-Etic Approaches

The second way values research differs is whether it focuses on emic or indigenous concepts as opposed to comparative or universally derived concepts. The emic approach advocates illuminating Chinese-specific psychological phenomena and thick indigenous theorizing. Thus far, it has produced a voluminous body of research that contributes to the discourse of Chinese distinctiveness and balances the psychological constructs that are grounded in methodological individualism with relational and holistic counterparts (e.g., Kim, Yang, & Hwang, 2006). The "uniquely Chinese" concepts that have been studied include, to name just a few, *mianzi/lian* (face), *xiao* (filial piety), *guanxi* (social network obligations), *renqing* (interpersonal sentiment), *hexie* (harmony), *mingyun* or *yuan* (fate, destiny), *bao* (reciprocity/retribution), *zhongyong* (the doctrine of the mean, middle way), and Confucian perspectives on education and achievement (see Chen, 2007; Kulich & Zhang, 2010 for comprehensive lists).

Since its inception in Taiwan, indigenous research has taken root in almost all Chinese communities, especially mainland China recently where several nationally funded projects are carried out to investigate contemporary values in different domains of life that build upon indigenous insights (see Kulich & Zhang, 2010, for a review). Independent literatures have been developed, undergirding the need for edited volumes dedicated specifically to Chinese psychology (e.g., Bond, 1996, 2010).

However, the distinctiveness question (Smith, 2010) can be addressed more adequately with an external yardstick against which indigenous concepts are compared. What the etic approach has done is to export the indigenously derived values to non-Chinese cultures or link them with universal frameworks of basic values. Its yield includes identifying new dimensions that may be less salient in Western cultures and nonetheless universally recognized such as the long-term orientation. With psychology becoming more global, it has also been made possible to plot Chinese societies in a multicultural space against some universal dimension of values. In some cases, Chinese populations do not score particularly high on the dimensions that presumably originated from Chinese schools of thought. Thus, the emic-etic dialectic in the Chinese context is seen in the perhaps necessary tension between attending closely to Chinese-specific values and searching their rough equivalence in broader cultural extension.

Explicit Versus Implicit Measurements

Finally, Kluckhohn's definition anticipates values as measurable explicitly or implicitly. Such methodological choice reflects whether values are assumed to be consciously or unconsciously formed goals. The canonical approach in cross-cultural psychology prescribes self-report methods, which reflects its conceptualization of values as consciously endorsed. However, self-report scales have been critiqued for their lack of validity; therefore, alternative measures were developed. They range from scenario-based behavioral measures to carefully calibrated tasks without people's awareness of their true purpose (cultural task analysis, Kitayama & Imada, 2010; thematic apperception tests, Hofer & Bond, 2008). What these implicit measures share is the notion that cultural values are grounded in recurrent cultural practices usually without explicit learning or cognitive mediation. Because the implicitly inscribed cultural scripts are

often taken for granted, it is difficult for people to verbalize or introspect on them. So people's behavior is habitually attuned to common cultural values or norms (Chiu et al., 2010), unless situational cues call the default behavioral pattern into question and indicate an alternative course of action. In contrast, explicit values may take on idiosyncratic meaning that reflects one's appropriation of culture or unique experiences.

Similar to the levels of analysis distinction, implicit and explicit measures may not converge (cf. Kitayama & Imada, 2010). When it comes to deep-rooted Chinese values, their shared endurance may be more readily observable via the implicit methods than the direct route to what is articulable. Conversely, values developed or altered as a result of more recent experience (see below) may be more amenable to explicit methods.

Who Are "the Chinese?" Multiple Voices and Positions

It is increasingly problematic to characterize Chinese culture and the values it embodies as a monolithic entity in a globalized world. Recognizing Chinese subgroups situated in different ecological niches calls for a different conceptualization of Chinese values as a repository influenced by a variety of philosophical traditions that evolve in a historically contingent way such that some values are carried on, others transformed, and yet others suppressed. Again, there are at least three ways in which the Chinese monolith can be broken down: geopolitical variations, modernization effects, or Diaspora perspectives.

Geopolitical Differentiation

First, Chinese societies (Hong Kong, Taiwan, mainland China, and Singapore) occupy different geopolitical landscapes. At both individual and cultural levels of analysis, empirically there is no core constellation of values shared among all Chinese societies when plotted in a multicultural space. Schwartz's culture-level analysis found Singapore resembling the ideal type of collectivism (high in embeddedness, hierarchy, and low in autonomy and mastery) but mainland China deviating from it in its high endorsement of entrepreneurship (Schwartz, 1994). In-depth cluster analyses showed that Chinese societies rarely cluster together in the first step in the multicultural space at either individual or cultural level of analysis (Bond, 1996). The uniting hallmark is acceptance of hierarchical differentiation at the cultural level and identification with in-groups at the individual level; however, there is more dispersion on other dimensions (Bond).

The values differences among Chinese societies are due, in part, to economic, ideological, and structural variations which reinforce and constrain the expression of certain values differentially (e.g., first the suppression and now the recent revival of a version of Confucianism in mainland China). Carving out a distinctive identity is likely involved as well. This is noted for many Hong Kong Chinese that express allegiance to a westernized Hong Kong Chinese identity over a pan-Chinese identity. This suggests that researchers need to be prepared for observing different values between the different Chinese groups.

Social Modernization Effects

The second point concerns the flux of change amid societal modernization. Not only are Chinese living in multicultural Chinese societies (e.g., Hong Kong and Singapore), but they are confronted with dual identity management in which one identity is attached to an inclusive Chinese heritage and the other to surging influxes of Western culture or remnants of colonial history (Hong et al., 2010). As economic development and cultural change proceed, mainland Chinese (especially in coastal cities such as Shanghai and Guangzhou) and Taiwanese Chinese people have began to sense a similar friction between traditional and modern, imported values (Kulich & Zhang, 2010). Both elements coexist paradoxically in the same society (Faure & Fang, 2008) and lead to the emergence of a traditional-modern bicultural self (Lu & Yang, 2006).

Some cross-cultural research continues to investigate the complex reciprocal relationships between cultural values and economic growth in the Asian Pacific region. Other studies focus on

personality and value changes as a consequence of organizational and structural reforms within mainland China. Developmental research on Chinese parenting has also attended to how traditional child-rearing beliefs or practices are being selectively adopted.

The Chinese Diaspora

To cast an even wider cultural net, the Chinese Diaspora that resulted from migration to non-Chinese societies should be considered as well. The cultural environments that overseas Chinese inhabit stand out in one fundamental aspect that they comprise one of many ethnic minorities in the receiving societies. The potentially threatening nature of such an intergroup context may instigate a stronger reactive need for them to preserve quintessential Chinese values compared with Chinese at home. This often leads to the paradoxical cultural encapsulation effect whereby immigrants are encapsulated in the cultural values of a historical era from their ancestral homeland as a means of affirming their ethnic identity. In contrast, most ethnically Chinese societies continue to evolve in a dynamic fashion.

Cultural encapsulation highlights the fluidity of claims to Chinese values as they are practiced in varied corners of the world. For example, it can be used to explain the tendency among overseas Chinese scholars to homogenize Chinese culture to the point of essentializing it. The motivational underpinnings of the social construction of Chineseness underscore the need to conduct a different kind of comparative research that compares groups of ethnic Chinese embedded in majority versus minority social structures. Ultimately, the expression and negotiation of values must be brought to bear on individuals participating meaningfully in a specific cultural context.

Integration: The Cultural Fit Hypothesis

The cultural fit hypothesis posits that congruence between personal values and those values afforded by the cultural environment confers positive subjective well-being (SWB); conversely, lack of congruence is maladaptive. Consistent with the cultural fit hypothesis, multiple economic and cultural pathways to SWB have been found (see Tov & Diener, 2007 for a review). Besides wealth, the individualism-collectivism dimension has proven most useful in understanding cross-cultural differences in predictors of SWB. There is considerable support that individual sources of happiness are more important to SWB in individualistic cultures, whereas social or relational sources of happiness are more important to SWB in collectivistic cultures. For example, self-esteem has been consistently found to be a weaker predictor of SWB in several Chinese samples.

These cross-cultural findings dovetail well with the distinction Chinese indigenous psychologists make between individual-oriented and socially oriented conceptions of SWB (see Lu, 2010 for a review). Lu argued that traditional Chinese lay theory of happiness is characterized by "role obligations" that reflect Confucian ethics and "dialectical balance" influenced by Taoist philosophy. Therefore, core Chinese values are implicated, though not exclusively, in the cultural underpinnings of Chinese SWB, which seems distinct from both hedonic and eudaimonic approaches that are dominant in the SWB literature.

Given the continued interest in cultural change, the broadly defined collectivistic countries differ in the extent of societal modernization within themselves. Therefore, integrative models that incorporate both economic and cultural factors are needed to test their potentially interactive effects on SWB. This may be particularly true of various Chinese societies, because modernization may lead both independence and interdependence to be important factors in predicting SWB (Lu & Yang, 2006). There was some support for the relevance of such a hybrid model in modernized East Asian societies (Cheng et al., 2011).

Despite the general progress in understanding cultural processes in SWB, no definitive conclusion can be drawn about the role of value endorsement in the cultural fit hypothesis yet. On the one hand, there may be values that meet universal psychological needs and hence are conducive to well-being across cultures (Sagiv & Schwartz, 2000). On the other hand,

cross-cultural evidence for value fit is limited so far. Current research tends to focus on values of specific content or narrower contexts, making it difficult to integrate the results and assess their generalizability. Moreover, there are very few studies that directly tested cultural fit by measuring both individual and cultural values in the same study.

In light of these problems, future research interested in cultural fit in the Chinese context can be strengthened in a number of ways. There is a need to differentiate cultural ratings of actual importance from cultural ratings of perceived importance, each representing a different operationalization of culture or cultural values. It remains to be tested whether it is one's alignment with averaged self-ratings of values or intersubjective ratings of values that better predicts SWB in the Chinese communities.

Future research can also benefit from considering cultural fit based on a larger list of values such as Schwartz's values survey rather than specific types. Furthermore, there are competing sets of cultural meanings in contemporary Chinese societies, creating a melange of traditional, modern Chinese, and Western values. To the extent that those culturally diffuse values can be disentangled, they may have differential applicability to the SWB of the Chinese people (cf. Lu, 2010). Clearly, to assess the cultural fit hypothesis in the Chinese societies, we need to gauge the relevance of which specific frame(s) of cultural values applies to which demographic groups or subcultures. At the same time, an overarching sense of "Chinese cultural values" may provide a basis of meaning for many people of Chinese descent in varied contexts.

Cross-References

- ▶ Chinese Culture
- ▶ Cultural Values
- ▶ Cultural Well-being
- ▶ Life Satisfaction
- ▶ Person-environment Fit Theory
- ▶ Schwartz Human Values Scale
- ▶ Value Theories

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Chinese Version of Dyadic Adjustment Scale

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Synonyms

Marital quality in Chinese people

Definition

The Chinese Dyadic Adjustment Scale is a translated scale which attempts to assess different dimensions of dyadic adjustment in marriage in Chinese couples.

Description

Assessment of Marital Quality

In the field of family research, assessment of marital adjustment has received much attention in the past few decades, and many marital quality measures have been developed (Sabatelli, 1988). According to Spanier (1976), marital adjustment was defined as "a process, the outcome of which is determined by the degree of: (1) troublesome dyadic differences; (2) interpersonal tensions and personal anxiety; (3) dyadic satisfaction; (4) dyadic cohesion; and (5) consensus on matters of importance to dyadic functioning" (p. 17). Based on this conception, Spanier (1976) developed a 32-item Dyadic Adjustment Scale (DAS). There were four steps in the scale construction: (1) a pool of items was constructed, including commonly used and newly constructed items; (2) assessment of content validity of the items by a team of judges; (3) administration of the scale to two contrasted groups (218 married and 94 divorced persons); (4) exclusion of items which could not maximally discriminate the married and divorced samples; and (5) factor analyses were performed to remove items which were inconsistent with the original conceptual framework.

Spanier (1976) reported that the DAS had high internal consistency, and findings suggesting the content, criterion-related, and construct validity of the test were obtained. Factor analyses showed that there were 4 dimensions assessed by the DAS, which constitute the Dyadic Consensus Subscale, the Dyadic Satisfaction Subscale, the Dyadic Cohesion Subscale, and the Affectional Expression Subscale. In addition to the claim of Spanier (1988) that the DAS had been used in more than 1,000 studies, Graham, Liu, and Jeziorski (2006) further

pointed out that "the DAS is perhaps the most widely used measure of relationship quality in the social and behavioral sciences literature" (p. 701). Besides, the DAS is frequently used in marital and family therapy contexts. Given its popularity and good psychometric properties demonstrated in various studies, the DAS has been translated into different languages and used in different cultures (Shek, 1995).

Although the DAS is "built upon a sound conceptual framework" (Graham, Liu, & Jeziorski, 2006, p. 897) and has been used extensively across the world, there are at least two areas of concern. First, there is conflicting evidence on the dimensionality of the DAS. While the four-factor model suggested by Spanier (1976) was replicated in a few subsequent studies, there are researchers who claimed that Spanier's (1976) model was problematic and argued for a one-factor (Sharpley & Cross, 1982) or three-factor model (Kazak, Jarmas, & Snitzer, 1988). Moreover, Sabourin, Lussier, Laplante, and Wright (1990) further showed that the unidimensional model did not constitute an acceptable representation of the data and proposed an alternative hierarchical factor model.

With regard to the different factorial structures of the DAS identified in the existing research, several weaknesses intrinsic to these factor analytic studies are noted. First, the sample size in the available studies was generally small. As remarked by Shek (1995), although the DAS has been used in more than 1,000 studies, very few factor analytic studies of the DAS were based on a sample of more than 1,000 subjects. Second, few researchers have attempted to assess the stability of the obtained factor solution. Third, exploratory factor analyses were commonly used in the existing studies, whereas confirmatory factor analyses were seldom performed. Finally, most of the available research findings on the dimensionality of the DAS were based on the English version of the scale.

The second area is concerned about the application of the DAS in different Chinese contexts, given the specific nature of marriage in Chinese people. In the traditional culture, the husband-wife relationship was regarded as one of the "five cardinal relationships," and the roles of husband and wife have been rigidly defined in the Confucian heritage (Shek, 2001). Although urbanization and Westernization have taken place in the past few decades, traditional Chinese cultural influence might still have subtle but important impacts on marriage nowadays. Therefore, it is theoretically and practically important to ask whether Western family measures can be used on Chinese people. However, a survey of the literature shows that there are to date few scientific studies using the DAS in the Chinese context. In fact, although the development of marital assessment tools has been vigorous in the West over the past few decades, no serious attempt has been made to develop psychometrically sound instruments to assess the quality of relationships between husband and wife in the Chinese culture.

The Chinese Dyadic Adjustment Scale (C-DAS)

Shek and his colleagues translated and validated the Chinese version of the Dyadic Adjustment Scale (C-DAS). In the original validation study (Shek, 1993), the C-DAS was administered to 91 maritally "adjusted" and 81 maritally "maladjusted" adults, along with other instruments assessing marital satisfaction (the Chinese Kansas Marital Satisfaction Scale) and marital expectation (the Chinese Marital Comparison Level Index). The C-DAS was found to have high internal consistency, and the scale score was observed to correlate substantially with measures of marital satisfaction and marital expectations but not significantly with measures not expected to be related to marriage. There were also significant differences between the "adjusted" and "maladjusted" marital groups of subjects in terms of C-DAS scores. The findings generally suggest that the C-DAS can be used as an objective marital assessment tool in the Chinese context, although some minor refinements are needed.

In another study (Shek, 1995), the C-DAS was administered to 1,501 married adults, along with other instruments assessing their psychosocial adjustment. Exploratory factor analysis showed that four factors can be extracted from the scale

(Dyadic Consensus, Dyadic Cohesion, Dyadic Satisfaction, and Affectional Expression), which could be reliably reproduced in two randomly split samples as well as in the male and female groups. Such a factor structure is highly similar to the original framework proposed by Spanier (1976), and the findings support the multidimensional nature of the C-DAS. Contrary to the data reported in previous studies, factor structures based on the male and female samples were very similar and stable. These findings give support to the universality of the construct of dyadic adjustment as indexed by the DAS, although some areas of refinement are also suggested. More importantly, the study revealed that a change in the language used in the DAS items does not seem to adversely affect the dimensionality of the DAS.

In another study utilizing the same data set (Shek & Cheung, 2008), confirmatory factor analyses were conducted, and the results showed that the four factors (Dyadic Consensus, Dyadic Cohesion, Dyadic Satisfaction, and Affectional Expression) were subsumed under a second-order Dyadic Adjustment factor. Invariance of the factorial structure between men and women was also found. The findings suggest that the dimensions of marital adjustment assessed by the Chinese Dyadic Adjustment Scale can be replicated in the Chinese culture, thus providing support for the use of the C-DAS for assessing marital adjustment in Chinese people.

There is also additional support for the construct validity of the Chinese Dyadic Adjustment Scale based on different theoretical predictions: C-DAS scores were positively related to measures of parent-child relationship (Shek, 1998); marital quality measured by the C-DAS was positively related to people's physical and psychological health (Shek, 1999); parental marital quality (as indexed by C-DAS scores) was positively related to parental well-being, parent-child relational quality, and adolescent adjustment (Shek, 2000). Significant relationships between C-DAS scores and measures of family functioning were also reported (Shek, 2005).

Cross-References

- ▶ Chinese Culture
- ▶ Family Quality of Life
- ▶ Marital Adjustment
- ▶ Marital Quality

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Chinese Version of Family Assessment Device

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Definition

The Chinese version of Family Assessment Device is a translated scale based on the McMaster Model of Family Functioning which attempts to measure family functioning among Chinese people.

Description

The Family Assessment Device

Family plays a critical role not only in one's development but also in a variety of psychosocial and mental health problems. To understand and improve family functioning, it is important to develop objective measures of family assessment. Based on the McMaster Model of Family Functioning, Epstein, Baldwin, and Bishop (1983) developed the Family Assessment Device (FAD) to measure family functioning. The FAD is widely used to assess family functioning in family therapy context, and it has been translated into different languages.

According to the McMaster model, there are six dimensions of family functioning. The first dimension is problem solving, which refers to the family's ability to solve problems which contributes to effective family functioning. Communication is the second dimension which refers to the effectiveness and content of information exchange among family members. The third dimension is roles, which addresses the issue of whether the family has recurrent patterns of behavior to discharge family functions. The fourth dimension is affective responsiveness that refers to family members' ability to respond with appropriate affect to environmental events. The fifth dimension, affective involvement, denotes the amount of affection family members place on each other. Behavioral control is the final dimension which assesses whether the family has norms or standards governing individual behavior and responses to emergency situations.

In the Family Assessment Device, items assessing these dimensions are included (problem solving, six items; communication, nine items; roles, 11 items; affective responsiveness, six items; affective involvement, seven items; behavior control, nine items). In addition to the above six subscales, a 12-item General Functioning (GF) subscale, which assesses the overall health/pathology of the family, was developed and included in the FAD (Epstein et al., 1983). In a detailed review of the psychometric properties of several measures of family functioning, Tutty (1995) concluded that the FAD possesses excellent psychometric properties.

The Chinese Version of the Family Assessment Device (C-FAD)

Although the FAD has an impressive record of its use for assessing family functioning in different populations and in different cultures (McFarlane, Bellissimo, & Norman, 1995; Roncone et al., 1998; Wenniger, Hageman, & Arrindell, 1993), Shek (1999, 2001) pointed out several limitations in the application of the FAD to Chinese people. First, there are research findings showing that the reliability of the FAD subscales is not always high. For example, Cronbach's alpha coefficient for the roles subscale was 0.57 in a nonclinical sample (Kabacoff, Miller, Bishop, Epstein, & Keitner, 1990). Second, the temporal stability of the FAD scales was seldom examined and reported. Third, although the relationships between the FAD and other family functioning measures (e.g., the Family Unit Inventory) were

found in validity studies (Miller, Epstein, Bishop, & Keitner, 1985), few researchers have employed multiple measures of family functioning and psychological adjustment to examine the psychometric properties of the FAD in a single study. Fourth, the discriminant validity of the FAD scales in the non-English-speaking contexts remains to be demonstrated (Roncone et al., 1998).

Fifth, existing findings on the factor structure of the FAD are inconclusive. While there was support for the hypothesized six-dimensional structure of the FAD, contradictory evidence was also reported (Roncone et al., 1998). Sixth, the psychometric properties of the FAD scales are based primarily on adults (Byles, Bryne, Bolye, & Offord, 1988; Miller et al., 1985) and late adolescents (Epstein et al., 1983). There is a need to know how well the FAD can be applied to early adolescents. Finally, not much discussion has been focused on the psychometric properties of the FAD in the Chinese culture, and there are few published studies on family assessment tools for Chinese people (Phillips, West, Shen, & Zheng, 1998, Shek, 1998). Obviously, an examination of the psychometric properties of the FAD scales in the Chinese population would constitute an important step to fill the gap.

Against this background, Shek, Lai, and Lai (1998) translated the 60-item Family Assessment Device into Chinese and conducted a series of studies to examine the psychometric properties of the Chinese version of the FAD (C-FAD) on samples of early adolescents in Hong Kong. In the design of the studies, multiple measures of family functioning (including the Self-Report Family Inventory, Family Awareness Scale, and Family Assessment Instrument) and psychosocial functioning (e.g., trait anxiety, existential well-being, life satisfaction, and mastery) were included (Shek, 2001, 2002; Shek et al., 1998). In Study 1, the test-retest reliability, internal consistency, concurrent validity, and construct validity of the FAD scales were examined. In Study 2, the reliability and validity of the FAD were tested in a clinical group and a nonclinical group. In Study 3, the psychometric properties of the FAD in a community sample were investigated.

Several findings were obtained from the series of studies. First, with different adolescent samples, the C-FAD subscales consistently showed acceptable internal consistency and high temporal stability (test-retest reliability coefficient ranged from 0.52 to 0.81) although the alpha values for two scales (affective responsiveness and behavioral control) were not high and generally lower than those reported in the English-speaking communities. These findings lend support for the reliability of the C-FAD. Second, as predicted, different dimensions of the C-FAD were significantly associated with other measures of family functioning and various indicators of psychological well-being, which provides support for the concurrent validity of the scales. Third, the C-FAD subscales successfully distinguished participants in clinical and nonclinical families, and thus the discriminant validity of the scales was supported. Taken together, these results suggest that the C-FAD possesses good psychometric properties when applied to Chinese populations and could be used as an effective measure of family functioning in the Chinese context.

With particular reference to the psychometric properties of the General Functioning (GF) subscale of the FAD, satisfactory reliability and validity data were reported by Shek (2001) on different Chinese adolescent samples. First, it was found that the GF scale was temporally stable and internally consistent. Second, the GF scores were able to discriminate a clinical group and a nonclinical group. Third, there was support for the concurrent and construct validities of the GF scale in different samples. The good psychometric properties of the GF subscale indicate that this scale is a good choice for family researchers and practitioners who are interested in assessing global family functioning of Chinese families in a relatively quick and efficient manner.

In light of these findings, it is proposed that the development of the Chinese version of the Family Assessment Device (C-FAD) and the accumulation of research findings on the psychometric properties of the C-FAD would enable social workers and family practitioners to assess family functioning in the Chinese culture in an objective

manner. Given that there are very few available family assessment tools in the Chinese context and the lack of effective measure has adversely affected the development of family intervention work among Chinese populations (Phillips et al., 1998), the development of C-FAD can be considered an important contribution to the field.

Cross-References

- Chinese Culture
- Chinese Family Assessment Instrument
- Chinese Version of Self-Report Family Inventory
- Family Functioning and Well-Being
- Family Quality of Life

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Chinese Version of Self-Report Family Inventory

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Synonyms

Assessment of family functioning in Chinese people

Definition

The Chinese Self-Report Family Inventory is a translated scale which attempts to assess perceived family functioning in Chinese families.

Description

Assessment of Family Functioning

Based on the Beavers systems approach to family assessment, Beavers, Hampson, and Hulgus (1985) developed the Self-Report Family

Inventory (SFI) which measures an individual's perceptions of family competence and style. While there were 44 items in the original SFI (Beavers et al., 1985), a modified version with 36 items was later constructed (Beavers, Hampson, & Hulgus, 1990). The SFI has been used to assess family functioning in different populations and in different cultures (Shek, 1998c).

There are research findings indicating that the SFI possesses acceptable psychometric properties. Regarding the reliability of the test, there is support for its internal consistency (Green, 1987; Hampson, Hulgus, & Beavers, 1991) and temporal stability (Beavers & Hampson, 1990; Beavers et al., 1990), although the reliabilities for some of its subscales might not be high. For the validity of the SFI, research findings supporting its concurrent and construct validities have been reported (Green, 1987). In his review of several measures of family functioning, Tutty (1995) concluded that the psychometric properties of the SFI "are supported with good concurrent validity with other family functioning measures and excellent internal consistency" (p. 103).

However, there are two limitations of the SFI. First, available research findings on the dimensionality of the SFI are not conclusive. Different findings pertinent to the factor structure of the 36-item SFI have been found. In a series of studies, six factors from the SFI were found, including family health, conflict resolution, communication, cohesion, leadership, and emotional expression (Hampson, Beavers, & Hulgus, 1989; Hampson et al., 1991). On the other hand, Beavers and Hampson (1990) suggested that there were five factors intrinsic to the SFI, which included health/competence, conflict, cohesion, leadership, and emotional expressiveness. They further stated that "the scale measures some consistent themes of family life across many different samples" (p. 59). Nonetheless, Teja and Stolberg (1993) reported that only one factor (which was similar to the family health subscale) was extracted from the responses to the SFI.

The second limitation is that the SFI has been mainly used in English speaking settings. From a cross-cultural perspective, it can be conjectured that what are considered to be important for family functioning in the Western culture might not receive strong emphasis in the Chinese culture. For example, while mutual respect among family members is emphasized in the Western contexts, Chinese wives were taught to obey their husbands ("chu jia cong fu" – when a woman gets married, she should obey her husband) and children were socialized to obey their fathers ("fu ming nan wei, bu gan bu cong" – one should not disobey father's orders) in accordance with the five cardinal relations ("wu lun") in the traditional Chinese culture. While emotional expression is considered to be an important attribute of a healthy family in Western societies (e.g., Beavers & Hampson, 1990), the use of forbearance ("bai ban ren nai" – to use all forbearance) and self-suppression in dealing with family issues were emphasized in the traditional Chinese culture. Actually, family members in the traditional Chinese culture were not trained or encouraged to openly discuss or comment on one's family as well as the behavior of the elder members in the family. Against this background, one can expect that Chinese people might lack the ability, perspective, and/or language to describe one's family. This conjecture is in sharp contrast to Westerners who are socialized to express their views and emotions about their family. A logical deduction from the above discussion is that Chinese people might have a different perception of family competence and their view of family functioning may be less differentiated, as compared to Westerners (Shek, 1998c, 2001b).

The Chinese Self-Report Family Inventory (C-SFI)

Shek (1998c) first translated the Self-Report Family Inventory into Chinese and carried out three validation studies (Shek & Lai, 2001). In Study 1 (N = 361 adolescents), results showed that the Chinese version of the Self-Report Family Inventory (C-SFI) was temporally stable and internally consistent and there was support for its concurrent and construct validities. Study 2 showed that the C-SFI scores were able to discriminate a clinical group (N = 281) and a nonclinical group (N = 451). In Study 3, a survey based on 3,649 secondary school students was conducted. Results gave support

for the internal consistency, concurrent validity, and construct validity of the C-SFI in different adolescent samples. Factor analytic findings revealed that two factors can be abstracted from the scale (Family Health and Family Pathology) and the two factors could reliably be reproduced in different adolescent subsamples based on gender and grade. This observation was inconsistent with the previous findings that there are five to six dimensions of the SFI (Shek, 2001b).

In another study, the C-SFI was administered to 858 Chinese parents and 429 adolescent children (Shek, 1998c). Results showed that the Chinese SFI was internally consistent in the parent and adolescent samples. Consistent with the theoretical predictions, family functioning ratings obtained from different sources were significantly related to measures of adolescent psychological well-being (general psychiatric morbidity, life satisfaction, purpose in life, hopelessness, and self-esteem), school adjustment (perceived academic performance and school conduct), and problem behavior (Shek, 1997). Regarding factor analyses, findings revealed that two factors were abstracted from the scale (Family Health and Family Pathology) and they could also be reliably reproduced in different random subsamples and in the parent and adolescent samples. Contrary to the previous findings that there are five to six dimensions of the SFI, findings of this study again showed that the C-SFI has two dimensions. While further effort should be made to clarify the dimensionality of the original SFI, the observed cultural discrepancy may be due to the possibility that Chinese people do not have a differentiated perception of family functioning (Shek, 1998c).

In a related longitudinal study, the C-SFI was administered to 756 Chinese parents and their adolescent children (N = 378) on two occasions separated by one year. Results showed that the C-SFI was internally consistent in different samples at different time. Consistent with the theoretical predictions, family functioning based on ratings obtained from different sources was concurrently related to hopelessness, life satisfaction, self-esteem, purpose in life, and general psychiatric morbidity at time 1 and time 2. Longitudinal and prospective analyses (time 1 predictors predicting time 2 criterion variables) suggested that the relations between family functioning and adolescent psychological well-being were bidirectional in nature (Shek, 1998a). Results also showed that the discrepancy between adolescents and their parents in perceptions of family functioning was concurrently related to adolescent hopelessness, life satisfaction, self-esteem, purpose in life, and general psychiatric morbidity at both time 1 and time 2. Longitudinal and prospective analyses (time 1 predictors predicting time 2 criterion variables) suggested that the relations between discrepancies in perceptions of family functioning and adolescent psychological well-being were bidirectional (Shek, 1998b). Finally, factor analyses revealed that two factors were abstracted from the scale (Family Health and Family Pathology) and they could be replicated in different samples at different time (Shek, 2001a). There are other studies showing that family functioning assessed by the C-SFI was related to adolescent psychological well-being, problem behavior, and school adjustment, which further establish the convergent validity of the measure (Shek, 2002).

The above studies strongly support that the C-SFI possesses good psychometric properties in different Chinese adolescent samples. The available research findings clearly suggest that the C-SFI is valid and reliable and there are two stable dimensions intrinsic to the scale.

Cross-References

- ▶ Chinese Culture
- ▶ Chinese Family Assessment Instrument
- ▶ Family Functioning and Well-Being
- ▶ Family Quality of Life
- ▶ Marital Adjustment
- ▶ Marital Quality

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Choice

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Synonyms

Internal locus of causality; Preference; Selection; Self-control; Self-endorsement of one's action; Volition

Definition

Mental process of evaluating the merits of multiple options and selecting one of them.

Description

In general, choices can be divided into two distinct types: autonomous versus controlled. Autonomous choice refers to a selection of options initiated and sustained by one's true self. Controlled choice refers to a selection made under pressure and involving inner conflict (Moller, Deci, & Ryan, 2006; Ryan & Deci, 2006). Studies have documented that autonomous choice relates to greater subjective vitality, better performance, and greater likelihood of maintaining desired behavior changes in various contexts such as families, schools, workplaces, religious institutions, sport teams, and clinics (see Ryan, Deci, Grolnick, & La Guardia, 2006 for review). In particular, autonomous choice in health care settings has shown substantial benefits by leading persons to greater program involvement, adherence, and maintained change for behaviors such as smoking cessation, weight loss, glucose control, and exercise (Williams, 2002).

In contrast to this, making controlled choices has been related to energy draining or ego depletion, such that the behavior associated with the

choice has been less likely to be sustained (Baumeister, Bratslavsky, Muraven, & Tice, 1998). In consumer settings, exposure to too many options discourages subsequent consumption (Iyengar & Lepper, 2000). It has been argued that the different consequences of these two types of choice may depend on the perceived locus of causality behind the decision. Perceived competence, based on perceptions of internal locus of causality of behavior, has been associated with positive predictors of both self-report and behavioral measures of well-being and quality of life. On the other hand, the sense of pressure and tension that are associated with perceptions of external locus of causality has been related to indicators of negative well-being (Moller et al., 2006).

Studies have also shown that when the environment supports autonomous choice, it leads to mindfulness – the tendency to be aware of what is occurring in the moment (Brown & Ryan, 2003). Enhancing such reflective awareness (which many clinical approaches rely on) may be a key component fostering the tendency of persons to make autonomous choice in self-regulation, which in turn increases the likelihood of experiencing interest and enjoyment while engaging in the behavior, thereby sustaining the behavior. The implication of autonomous choice, however, may vary in different cultural contexts (Bao & Lam, 2008; Chirkov, Ryan, Kim, & Kaplan, 2003). Roles of other social environmental and task-specific factors in choice deserve further investigation.

Cross-References

► Freedom
► Freedom and Quality of Life

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Choice Experiments and WTP

► Willingness to Pay for Private Environmental Goods

Choir, Band, Orchestra, or Ensemble Participation

► Choral and Instrumental Music Ensemble Participation

Choral and Instrumental Music Ensemble Participation

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Synonyms

Choir, band, orchestra, or ensemble participation; Music ensemble performance

Definition

While significant benefits of music ensemble participation can be achieved through individual music making and performance, there are many aspects of group music making that are distinctive.

Participation in a music ensemble, whether ▶ singing or playing an instrument, is a complex group activity. While individual performance required the act of working together, collaborating within a community of music makers extends the knowledge, skills, and understandings needed to successfully negotiate cultural musical landscapes. The physical, psychological, and sociocultural benefits of choral and instrumental music ensemble participation are directly related to ▶ quality of life.

Description

In music ensemble participation, music-making activities can range from participation in a school or community band, choir, or orchestra; Suzuki violin ensemble; garage band; and church choir to folk ensemble. Benefits are not restricted to specific populations, but extend from participation by school-aged students, community members in sacred and secular settings, to the elderly.

Physical and Psychological Benefits

Studies show that music making is a worthwhile physical and social activity impacting both physical and mental health. Under normal circumstances, the average person only uses a small portion of their lung capacity when breathing. In order to sing or play effectively, musicians must work for a greater lung capacity in order to feed the body and brain with revitalizing oxygen. Breathing also expels stagnant air, germs, and environmental toxins which may exist deep within the lungs (Stratton, 2008). To successfully sing or play an instrument, individuals must learn to not only be effective with their air support but become kinesthetically aware. Increased oxygenation in the blood stream, increased lung capacity, increased muscle activity, and better posture contribute to overall health and well-being (Welch, 2013; Clift, Hancox, Morrison, Hess, Steward & KreutzClift, 2008). Breathing exercises in rehearsals, aimed at improving technique, partnered with good posture, create crossover potential into daily living for ▶ stress management, ▶ asthma management, and alleviation of body ▶ fatigue.

People generally join ensembles because of their love of music making but most often find that it is also a significant stress reliever. Music plays a vital role in stress reduction and ▶ emotional well-being through the action of the endocrine system (Welch, 2013; Clift, Hancox, Morrison, Hess, Steward & KreutzClift, 2008). Levitin indicates that "music – and particularly joyful music – affects our health in fundamental ways. Listening to, and even more so singing or playing, music can alter brain chemistry associated with well-being, stress reduction, and immune system fortitude" (2008, p. 98; Cohen, Perlstein Susan Chapline, Kelly, Firth, & Simmens (2006). Studies at the University of California and University of Frankfurt have indicated a correlation between participation in group music making and immune system health (Beck, Cesario, Yousefi, & Enamoto, 2000); Kreutz, Bongard, Rohrmann, Hodapp, & Grebe, 2004). Hays and Minichiello (2005) state that music promotes ▶ quality of life by contributing to positive ▶ self-esteem, suggesting that music

making allows people to feel content and independent and lessens feelings of isolation and loneliness.

Participation in music ensembles in school-aged students is often related to the development of self-discipline, character, and inter- and intrapersonal skills (Campbell, Connell, & Beegle, 2007). Concentration and memorization are also skills developed through ensemble participation that are beneficial as life skills. Participation in school music programs may, in at-risk populations, steer individuals away from the use of drugs, alcohol, smoking, gang life, and promiscuous sex and for some, dissuade suicide and counteract depression. School music ensembles are not just classes or performance groups but guardians of their own specific culture that inform and enrich lives (Adderley, Kennedy, & Berz, 2003; Kuntz, 2011; Parker, 2010). They are bound by a common interest or set of shared values.

Studies in music therapy and health studies related to cognitive aging reinforce the value of participating in music making. Music making provides strong associations with, and memories of, a person's life. Hays and Minichiello (2005) suggest that music provides people with ways of understanding and developing their self-identity, of connecting with other people, of maintaining well-being, and of experiencing and expressing ▶ spirituality. Researchers at George Washington University who completed a 3-year study of members in senior chorales noted that participants enjoyed significantly better health, suffered fewer falls and less hip damage, had fewer doctor's visits, diminished the use of medications, experienced fewer vision problems, scored better in tests on depression and loneliness, and had increased involvement in other activities (Cole, 2005). In the field of music therapy, Ruud (1997) advocates for the significant benefits of music, suggesting that the achievement of a "strong flexible, and differentiated or coherent identity" (86) is central to the purpose of participation. He identifies four areas where music may contribute to quality of life: affective awareness of feelings, increased agency, ▶ sense of belonging and communality, and meaning and coherence in life. Czikszentmihalyi (1997) proposed that social isolation encourages distracted and distorted thoughts and contributes to the development of social disorders. His research showed that people feel more negative when they are alone, versus in the company of others. He also found that meaningful activities that cognitively engage improve both physical and mental health. In view of these findings, we can assume that individuals may receive more benefits from being engaged in both active and social forms of music involvement.

The effects of music listening and music making on the brain are an area of increased research and provide evidence of the health benefits of music and music participation. Musical activity has the distinct ability to engage almost the entire brain simultaneously while also exercising and building it up. Levitin states that "musical activity involves nearly every region of the brain that we know about, and nearly every neural subsystem. Different aspects of the music are handled by different neural regions – the brain uses functional segregation for music processing, and employs a system of feature detectors whose job it is to analyze specific aspects of the musical signal, such as pitch, tempo, timbre, and so on. . .Several different dimensions of a musical sound need to be analyzed – usually involving several quasi-independent neural processes – and they then need to be brought together to form a coherent representation of what we're listening to" (2006, pp. 85–86). Levitin cites singing as a complex procedure wherein various parts of the brain coordinate to process, plan, and produce music making. Further coordination is required; for example, in the setting of a choir, singers must blend, tune, balance, and articulate their vocalizing with others and often memorize their music as well. Other studies have shown that intellectual activities such as music making can improve brain function and compensate for the loss of brain cells associated with aging (Cohen et al., 2006); be useful to the treatment of patients with dementia, special needs, and low/no vision; exercise the brain and strengthen the synapses between brain cells (Weinberger, 2006); lead to bilateral cortical reorganization (Hanna-Pladdy & MacKay, 2011);

change the way the brain is shaped both at a young age and after a brain injury; and correlate to achievement scores.

Building Community and Bridging Social Gaps

The French translation of ensemble is "together." While individuals participating in an ensemble are interested in the development of individual skill and increased musical understanding, they also place a high value on personal social benefits provided by the experience of group ensemble participation (Jutras, 2011). The rehearsal and performance process of group music making allows an individual to enhance and refine self-identity through the examination and definition of his or her role in an ensemble. Small (1998) considers music to be a social process or a way in which we explore, affirm, and celebrate our concepts of ideal relationship. He believes that the meaning of music making lies in the acts of creating, displaying, and perceiving; music making is an activity in which we take part to understand relationships – with one another and with the "great pattern which connects." He states that "the relationships that are created in a musical performance are of two kinds: first, those among the sounds that the musicians are making, whether on their own initiative or following directions, and second, those among the people who are taking part. . .these two sets of relationships themselves relate in an ever more complex spiral of relationships which become too complex for words to articulate but which the musical performance itself is able to articulate clearly and precisely" (p. 184). In summary, the sum of the whole is greater than its individual parts.

While music serves to reinforce self-identity and define one's individual role in ▶ community participation, it also serves to increase cultural awareness and a greater understanding of cultural issues. Small's examination of the connections established through group music making extends to an individual's role in society. He indicates that "our exploration, affirmation and celebration of relationships does not end with those of a single performance, but can expand to the relationships between one performance and another, and, for those who are prepared to explore farther afield, to the relationships between performances in different styles, genres, and even whole musical traditions and cultures. It is an ever-widening spiral of relationships, and each twist of the spiral can widen our understanding of our own relationships, of the reality that we construct and is constructed by us by the society in which we ourselves live" (p. 210). Group music making breaks down social barriers while diminishing the impact of socioeconomic status, ethnic background, and age (Bailey & Davidson; Campbell, Connell, & Beegle, 2007) and contributes to diverse social interests (Campbell et al.; Lee, 2013). Brain research that tracks the chemical release of oxytocin and serotonin into the blood stream is direct evidence of the social bonding function of music (Levitin, 2008).

Individual Challenge, Happiness, and ▶ Flow

While many individuals pursue personal music-making activities, they may lack the expertise or resources to continue learning or developing skills in music on their own. Group participation provides anonymity for some participants; individual musicians can develop skills without the focused attention or "threat" offered in a solo environment. When a musician has the opportunity to face significant challenge and experience success in a performance environment, he or she experiences a sense of flow (Csikszentmihalyi, 1997) or "focused attention, readiness, and excitement combined with an almost paradoxical sense of calm" (Levitin, 2006, p. 54). Musical experiences provide the opportunity for an individual to feel a sense of discovery, "a creative feeling of transporting the person into a new reality" (Czikszentmihalyi, p. 74). It is this relationship between skill and challenge that produces that sense of flow that leads to an enhanced quality of life; however, it is important to consider several factors. First of all, ensemble-specific skills are unique in that they require both ▶ trust and communication between ensemble members. Second, challenges in the ensemble are directly related to the actions of other members of the ensemble. That is to say that each individual musician must be both

connected and reactive to the actions of each member of the ensemble.

Beauty and Cultural Values

Small indicates "There is no such thing as music. Music is not a thing at all but an activity, something that people do" (1998, p. 2). While the music-making rehearsal process plays a key role in the lives of ensemble participants, the music, the work studied, rehearsed, and performed, is also important. Significant musical works, worthy of study, are a composer's representation of beauty and hold ▶ aesthetic value. These works represent significant cultural and social understandings. The International Society for Music Education Community Music Activity Statement (2010) states "Community Music activities do more than involve participants in music-making; they provide opportunities to construct personal and communal expressions of artistic, social, political, and cultural concerns." By studying music from a wide variety of genres taken from a variety of cultural and sociological sources, musicians have the opportunity to perceive, explore, and respond to music and musical practices outside of their experiences. These studies both reinforce and extend an individual's cultural identity and understanding.

Summary

Small (1998) consider music making to be basic biological communication or part of the "survival equipment" of every human being. Group music making facilitates physical and psychological well-being and nurtures establishment and strength of community and cultural understanding. Its individual benefits to happiness or flow and its contributions to beauty and ▶ cultural values and ▶ cultural diversity reinforce its value in an examination of quality of life.

Cross-References

- ▶ Community Participation
- ▶ Folk Music
- ▶ Happiness
- ▶ Health
- ▶ Music

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CHQ-PF28

► Child Health Questionnaire (CHQ)

Chronic Fatigue Syndrome

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Synonyms

Myalgic encephalomyelitis; Myalgic encephalopathy

Definition

Chronic fatigue syndrome (CFS) is a chronic, debilitating illness characterized by post-exertional malaise, memory/concentration problems, unrefreshing sleep, and pain.

Description

Case Definition

The Centers for Disease Control and Prevention (CDC) first coined the term chronic fatigue syndrome (CFS) following reports of a patient cluster in Incline Village, Nevada (Holmes et al., 1988). The most internationally used definition of CFS (Fukuda et al., 1994) requires a new onset of fatigue (not caused by ongoing physical exertion and not substantially alleviated by rest) and the concurrence of four out of eight definitional symptoms (sore throat, tender lymph nodes, muscle pain, multijoint pain, headaches, post-exertional malaise, memory and concentration problems, and unrefreshing sleep). However, these criteria remain poorly operationalized, and due to the polythetic nature of the criteria, criterion validity is poor. For instance, patients are not required to have the cardinal symptoms of this illness including post-exertional malaise and memory/concentration problems. An international group of clinicians and researchers developed the Clinical Canadian Criteria for Myalgic Encephalomyelitis (ME/CFS) in 2003, which requires cardinal symptoms of the illness and also incorporates immune, neuroendocrine, and autonomic manifestations that were not included in the CDC case definitions (Carruthers et al., 2003). The ME/CFS case definition is yet to be widely accepted, but a recent attempt to operationalize these criteria by requiring both frequency and severity requirements for research and clinical utility has been made (Jason et al., 2010). An inadequate definition of this illness underlies many of the problems in quality of life people with CFS face: inability to access satisfactory health care; lack of understanding from friends, family, and employers; and a dearth of advanced treatments. Fortunately, there is some promising research ongoing within the scientific community to find biological markers of the illness, and such discoveries will do much to validate the legitimacy of this illness among health care professionals.

Prevalence

Accurate sampling and measurement methods are integral to the debate surrounding the prevalence estimates of CFS in the United States. The CFS prevalence rate was originally estimated by the CDC to be 4–8.7 per 100,000, suggesting that there were approximately 20,000 individuals

with CFS in the USA (Reyes et al., 1997). This estimate was derived from physician referrals from four US cities. Based on this early prevalence estimate, CFS would be considered a rare disorder; however, there was evidence that this initial prevalence estimate was not accurate.

In response to this early estimate by the CDC, Jason et al. (1999) conducted a large community-based epidemiology study in which they used stratified random sampling to screen 18,675 individuals in Chicago, Illinois, for CFS. The prevalence rate for CFS was estimated at 420 per 100,000. Results of the study indicated that the prevalence of CFS was higher than previously reported and was now estimated at approximately 800,000 Americans. In addition to calculating a new point prevalence rate for CFS, Jason and colleagues found that women, Latinos, middle-aged individuals, and persons of middle to lower socioeconomic status were at higher risk for this illness. These results directly contradicted the perception that the majority of CFS sufferers were upper-class white women. These overall findings were later corroborated by a CDC population based prevalence study of fatigue-related disorders (Reyes et al., 2003).

Most recently, the CDC developed an empiric case definition for CFS that utilized specific instruments and cutoff points (Reeves et al., 2005). This new case definition was later used in a community-based study in Georgia, and results of the study indicated that the CFS prevalence estimate was 2.54 %, or roughly over four million Americans (Reeves et al., 2007). These new estimates have been highly controversial, and the crux of the debate centers on the argument that the empiric case definition uses broadened criteria that could have the potential to wrongly classify individuals with CFS who instead have a primary affective disorder such as major depression. In support of this argument, Jason, Najar, Porter, and Reh (2009) found that 38 % of individuals with a sole diagnosis of major depressive disorder were misdiagnosed as having CFS using the CDC's empiric case definition. Therefore, the high CDC prevalence rate may be due to the inclusion of individuals with depression. The prevalence rate of CFS continues to be a highly debated topic among researchers and community members. The use of accurate sampling and classification methods for estimating the prevalence rate of CFS will improve perceptions of the legitimacy of this illness, which will have a broad impact on the quality of life of individuals with this illness.

Controversy Over the Name

The quality of life of patients with CFS is compromised in part due to the name given to the illness. Many members of the patient and scientific communities believe the name "chronic fatigue syndrome" trivializes the severity of the illness as it highlights only one of the many disabling symptoms (Jason, Eisele, & Taylor, 2001). Given that fatigue is a common phenomenon among the general population and among those with medical and psychiatric conditions (Jason, Evans, Brown, & Porter, 2010), the label CFS does not provide adequate differentiation from other fatiguing experiences. According to the most recent CDC CFS case definition report (Fukuda et al., 1994), the name was intended to be temporary until a better understanding of the pathophysiology of the illness was achieved. Yet, over 15 years later, CFS remains the most frequently used name despite the wishes of the majority of patients, researchers, and care providers of this illness (Jason et al., 2001).

The use of a more medically based name may help improve perceptions of legitimacy of the illness. Several names intended to better capture the physiological nature of the illness have been suggested, including myalgic encephalomyelitis, myalgic encephalopathy, and chronic fatigue and immune dysfunction syndrome. Indeed, prior to the development of the original CDC case definition for CFS (Holmes et al., 1988), the name myalgic encephalomyelitis was applied to this illness (Jason & Richman, 2007). In one study, medical students were presented with a written case study of a patient presenting with common CFS symptoms (Jason & Taylor, 2001). Participants were randomly assigned to one of three diagnostic labels applied to the case study patient: CFS, Florence Nightingale disease,

and myalgic encephalopathy. Medical trainees assigned the diagnostic label of myalgic encephalopathy rated the patient as having the poorest prognosis compared to those assigned to the other two labels. Findings from this study suggest that the name applied to this illness can influence the perceptions of medical professionals, and this may have an impact on patient care.

Quality of Life

CFS is a life-changing experience, as many who were previously active and healthy experience sudden limitations in physical and social functioning. The subjective quality of life of patients with CFS is likely unique compared to other illness groups because the sudden illness onset is concomitant with stigmatization and stereotyping by healthcare providers (Looper & Kirmayer, 2004; Raine, Carter, Sensky, & Black, 2004), alienation by family and friends (Komaroff & Buchwald, 1991), and a lack of curative treatments. Research suggests that patients with CFS have more physical and psychosocial functional limitations compared to healthy individuals, and increased psychosocial limitations compared to individuals with multiple sclerosis (Schweitzer, Kelly, Foran, Terry, & Whiting, 1995). As with other serious chronic health conditions, a higher percentage of patients with CFS had a cooccurring psychiatric condition compared to healthy controls.

Several studies have examined quality of life among patients, some focusing on level of functional impairment and others evaluating cognitive and emotional aspects of quality of life (McKay & Martin, 2010). In an international study, individuals with CFS in the USA, the UK, and Germany were found to function at least two standard deviations below the healthy population on measures of physical ability, interference with responsibilities due to physical illness, pain, vitality, perceptions of health, and social functioning (Hardt et al., 2001). Qualitative research suggests that patients with CFS experience a myriad of circumstances that reduce quality of life, including difficulty seeking adequate healthcare; economic, personal, and social loss; and lack of understanding from others due to the invisible nature of the illness (Schoofs, Bambini, Ronning, Bielak, & Woehl, 2004). Taken together, patients with this illness experience a range of physical, social, and emotional difficulties that clearly impact their quality of life.

Cross-References

- ▶ Criterion Validity
- ▶ Epidemiologic Measurements
- ▶ Physical Functioning (PF)
- ▶ Prevalence
- ▶ Psychiatric Disorders
- ▶ Quality of Life
- ▶ SF-36 Health Survey
- ▶ Social Functioning
- ▶ Stigmatization

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Chronic Heart Failure Questionnaire (CHFQ)

▶ Health-Related Quality of Life and Heart Failure

Chronic Hepatitis C

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Definition

Chronic hepatitis C: Hepatitis C virus (HCV) is a cause of blood-borne infections that affect 180 million persons worldwide. In most of the cases (60–80 %), infection becomes chronic with a risk of cirrhosis and primary liver cancer. Interferon-based regimens remain the standard treatment of HCV infection and lead to viral eradication in 60–80 % of the patients. New treatments are currently in development.

Description

The classical view of chronic hepatitis C (CHC) as an asymptomatic disease before the stage of decompensated cirrhosis has been repeatedly challenged by studies showing low health-related quality of life (HRQOL) in HCV carriers with mild liver disease. This altered HRQOL (mostly measured by the SF36 questionnaire) is attributed to the high prevalence of neuropsychological symptoms, such as fatigue or depressive mood, in patients with CHC. The explanation of this finding is debated and may implicate host as well as viral factors (Amodio et al., 2012; Spiegel et al., 2005).

Factors Related to the Host

Host factors refer to causes of impaired HRQOL that are not a direct or an indirect consequence of HCV infection. Past or ongoing drug abuse is probably the most important of these factors.

It is the main route of HCV acquisition and it is associated to an increased prevalence of neuropsychological disorders and to a reduced HRQOL. Other factors more prevalent in the context of CHC, and likely to affect HRQOL, are excessive alcohol consumption, low socioeconomic status, and comorbidities such as diabetes (Helbling et al., 2008). HCV carriers suffering from neuropsychological troubles are also more likely to take medical advice and to receive a diagnosis of CHC than apparently healthy HCV carriers, thus inducing an overrepresentation of symptomatic patients in the studied cohorts.

Factors Related to the Viral Infection

Two lines of argument suggest that, besides host factors, HCV infection could directly or indirectly impact HRQOL. First, many studies excluded patients with significant comorbidities, and several of them stratified their analysis according to the existence of drug use and still found altered HRQOL in HCV carriers. Second, it has been shown that successful antiviral treatment was associated with an amelioration of the HRQOL.

A role of liver fibrosis has been suggested by studies demonstrating an inverse correlation between stages of fibrosis and HRQOL in patients without previous decompensation. The explanation of this correlation is not obvious but could implicate circulating factors released by the liver or minimal hepatic encephalopathy.

Some authors have postulated a contribution of brain infection by the HCV. Evidences for viral replication in the central nervous system support this hypothesis as well as objective cerebral impairment revealed by magnetic resonance spectrometry in HCV carriers (Féray, 2012). This impairment has however not so far been convincingly linked to given symptoms or to a decrease in HRQOL.

The last hypothesis to explain a causal link between HCV infection and decreased HRQOL is the impact of the knowledge by the patient of his HCV status. Several studies have suggested that decreased HRQOL was restricted to patients informed of their infection and not in patients who were ignoring it (McDonald et al., 2012). This so-called labelling effect may be related to concern about the evolution of the disease as well as the stigma associated with HCV infection.

Conclusion

Impairment of HRQOL is highly prevalent in patients with CHC even before overt liver decompensation. It appears to be primarily related to host factors such as drug abuse, low income, or comorbidities. A causal role of the viral infection is likely to be also involved in some cases, probably as much via a "labelling effect" than by organs dysfunction induced by the virus. Improvement of HRQOL is a legitimate goal of therapy in patients with CHC. It can be achieved sometimes by antiviral therapy (which will however worsen transiently HRQOL) but also by a psychosocial support and proper information of the patients.

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Chronic Illness and Spiritual Needs

▶ Spiritual Needs of Those with Chronic Diseases

Chronic Kidney Disease

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Definition

Chronic kidney disease (CKD) is defined as kidney damage for three or more months, as defined by structural or functional abnormalities of the kidney, with or without decreased GFR manifested by either pathologic abnormalities or markers of kidney damage, including abnormalities in the composition of the blood or urine or abnormalities in imaging tests (National Kidney Foundation, 2002). The disease is classified by five stages according to the decline in glomerular filtration and the degree of kidney damage. The most severe form is the end-stage renal disease (ESRD): chronic kidney failure (National Kidney Foundation).

Description

CKD is characterized by a gradual loss of kidney function over time. In early stages, symptoms are often less severe. As the kidney disease advances, symptoms often increase. Common symptoms are fatigue and loss of energy, nausea and vomiting, changes in urination, sleeping trouble, muscle cramping, swollen feet, itchy skin, shortness of breath, and trouble concentrating (Afzali, Jayawardene, & Goldsmith, 2009). Living with CKD may impact on quality of life (QOL), and quality of life have been thoroughly studied in this population.

Generic health-related quality of life (HRQOL) instruments have been used in the CDK population, such as the Short Form-36 Health Survey (Ware & Sherbourne 1992), the EuroQoL-5 Dimension (The EuroQol Group, 1990), the WHOQOL assessment (The World Health Organization Quality of Life Assessment (WHOQOL) [WHOQOL], 1998), and the Sickness Impact Profile (Bergner, Bobbitt, Carter, & Gilson, 1981, Glover, Banks, Carson, Martin, & Duffy, 2011). However, the Short Form-36 Health Survey (Ware & Sherbourne, 1992) is the most widely used and validated measure of HRQOL in the nephrology literature (Liem, Bosch, Arends, Hejenbrok-kal, & Hunink, 2007, Goodkin et al., 2001; Wight et al., 1998).

HRQOL research in CDK patients has mostly focused on the end-stage renal disease phase. Several renal-specific instruments are developed. One of the first quality of life instrument to be used was the Quality of Life Index – dialysis version (Ferrans & Powers, 1985). Today, the most frequently used instrument seems to be the Kidney Disease QOL (Hays, Kalliich, Mapes, Coons, & Carter, 1994.) This questionnaire was originally developed for dialysis patients but has also been chosen to evaluate kidney transplant recipients. Two abbreviated versions of this instrument, the KDQOL Short Form (KDQOL-SF) and Short Form-36 (KDQOL-36), were created as more practical tools for both research and clinical practice. The KDQOL-36 in particular has been used frequently because it incorporates items from the SF-36 with the disease-specific domains (Glover et al., 2011) These domains address a patient's attitudes toward kidney disease with specific questions regarding disease-specific symptoms, the impact of disease-specific dietary restrictions on the patients quality of life, and their attitude toward the illness (Hays, 1994). The following subscales are included: (1) the generic core (12 items) which includes a physical health composite (8 items) and a mental health composite (4 items), (2) symptoms/problems related to kidney disease (12 items), (3) burden of kidney disease (4 items), and (4) effects of kidney disease. This contrasts with SF-36 which contains 8 different domains. Furthermore, Laupacis, Muirhead, Keown, and Wong (1992) developed a questionnaire measuring patient-specific symptoms – the Kidney Disease Questionnaire. This questionnaire contains questions added into five dimensions: physical symptoms, fatigue, depression, relationship with others, and frustration.

With regard to CDK with functional renal transplant, fewer disease-specific HRQOL questionnaires exist. For instance, the Kidney Transplant Questionnaire (Laupacis et al., 1993) which was previously developed for dialysis was developed also for use in kidney transplants. Its 25 items are grouped into five dimensions: physical symptoms, fatigue, uncertainty/fear, appearance, and emotional. The first dimension (physical symptoms) is patient specific. The questionnaire the End-Stage Renal Disease Symptom Checklist-Transplantation Module (Franke et al., 1999) was specifically developed to evaluate the effects of immunosuppressive medication on quality of life after renal transplantation. This instrument focuses on transplant-specific symptoms, side effects of immunosuppressive therapy, and psychosocial distress.

Overall, research has shown that HRQOL is poor for patients with end-stage renal failure (Yarlas et al., 2011, Spiegel, Melmed, Robbins, & Esrailian, 2008). HRQOL is a consistent predictor of mortality in end-stage renal disease and is therefore seen as an important outcome itself (Han et al., 2009). Mean scores for patients in the end-stage phase of CDK are lower than the general population on all dimensions (Wight, 1998). Scores are worse in physical compared to mental and emotional dimensions (Spiegel et al., 2008; Wight, 1998). The largest impact of ESRD is found in the physical function and general health scales, followed by the role-physical and vitality scales (Spiegel et al., 2008).

Predialytic patients with CKD have higher QOL compared to patients in hemodialysis (Perlman, 2005). Patients with CKD stage 4 have lower QOL scores than patients with CKD stage 5, although differences are not significant. Hemoglobin level is associated positively with higher mental and physical QOL scores (Perlman, 2005). Kidney transplantation is the renal replacement therapy that provides better HRQOL results. Transplantation is associated with higher scores independently of the effect of age and comorbidity. HRQOL of renal transplant patients with a good or acceptable renal function is similar to that of the general population (Ponton et al., 2001; Rebollo et al., 2000).

Cross-References

- ▶ Fatigue
- ▶ Physical Functioning (PF)
- ▶ Quality of life
- ▶ SF-36

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Chronic Low Back Pain

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Synonyms

Chronic lumbar pain; Chronic lumbopelvic pain; Low back pain, recurrent

Definition

Chronic low back pain is commonly defined as a condition characterized by pain located to the lower back persisting for at least 3 months. It is not a distinct clinical entity and diagnosis but rather a symptom associated with a wide range of impairment, activity limitation, and disability.

Description

Chronic low back pain (CLBP) is a condition occurring when acute low back pain does not resolve in the subsequent months. Although CLBP includes some specific conditions such as those involving nerve root affection or serious spinal pathology, the common characteristic is pain located below the costal margin and above the inferior gluteal folds (Vleeming, Albert, Ostgaard, Sturesson, & Stuge, 2008). In addition, there may be several other symptoms such as radiating pain and reduced functioning in everyday life. The condition may be disabling and has a large impact on quality of life of the individual. Long-term sick leave is also common, as well as early retirement.

CLBP is common, but the prevalence is difficult to estimate, particularly because of the unspecific criteria. Estimates of the 1-year incidence of a first-ever episode of low back pain range between 5 % and 15 %, while it has been reported as high as 26 % for the 1-year incidence of any episode of low back pain (Juniper, Le, & Mladsi, 2009; Hoy, Brooks, Blyth, & Buchbinder, 2010). There is an even larger variation in the reported point prevalence estimates hampering our possibilities to draw firm conclusions. Moreover, recurrences are common, occurring in 40–80 % of the patients (Vleeming et al., 2008). Low back pain occurs in children, as well as in adults and elderly. Although estimates are difficult to make, prevalence seems to increase slightly with age, until 60–65 years. Thereafter, a gradual decline is seen. There are conflicting reports regarding gender differences with respect to prevalence and incidence.

Some large studies have failed to find gender differences (Kopec, Sayre, & Esdaile, 2004), whereas a recent review showed a slightly higher prevalence in women (Hoy et al., 2010).

The pain, the functional implications, and the chronicity or recurrence all contribute to a marked impact with regard to health and quality of life of the individual. For instance, patients included in studies of treatment for symptomatic degenerative diseases reported 27–30 on the physical composite scale of SF-36 (Carreon, Glassman, & Howard, 2008). The changes typically improved by 10–15 on the same scale 1–2 years following treatment. Yet, these values are well below the norms for the population. Similarly, based on EQ-5D, Jansson, Nemeth, Granath, Jonsson, and Blomqvist (2009) reported improvement from 0.36 to 0.64 one year after surgery for lumbar spinal stenosis. About 80 % of the patients failed to reach the population norms.

It is commonly reported that quality of life not only varies between patients but also the response to treatment varies significantly. A number of studies have shown that the effects of treatment as determined by quality of life depend on the pain intensity, how widespread the pain is, and also psychosocial factors (Vleeming et al., 2008). Furthermore, the improvements appear more modest when evaluated by quality of life scales (e.g., EQ-5D or physical or mental composite scales of SF-36) compared with pain intensity or function (DeVine et al., 2011). Hence, the health-related quality of life measures are less responsive.

Although studies of CLBP have a long tradition, health-related quality of life as a distinct concept has only recently been included. Most studies have included other patient-oriented measures. For instance, function, limitations in activities and return to work have been extensively studied (Chapman et al., 2011). In general, these measures show the same wide variation as identified by the quality of life scales. There seems to be a growing interest in exploring the relationship between the various results obtained by different measurement tools as well as the concepts captured.

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Chronic Lumbar Pain

▶ Chronic Low Back Pain

Chronic Lumbopelvic Pain

▶ Chronic Low Back Pain

Chronic Obstructive Airways Disease (COAD)

▶ Chronic Obstructive Pulmonary Disease (COPD)

Chronic Obstructive Lung Disease (COLD)

▶ Chronic Obstructive Pulmonary Disease (COPD)

Chronic Obstructive Pulmonary Disease (COPD)

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Synonyms

Chronic obstructive airways disease (COAD); Chronic obstructive lung disease (COLD)

Definition

Chronic obstructive lung disease (COPD) is a term used historically as an umbrella for a variety of pathological lung diseases resulting in obstruction to airflow out of the lungs. The fact that it is a combination of coexisting entities present in varying proportions has led to some wordy definitions.

Used widely worldwide, the Global Obstructive Lung Disease initiative defines COPD as

> Chronic obstructive lung disease is a preventable and treatable disease with some significant extrapulmonary effects that may contribute to the severity in individual patients. Its pulmonary component is characterized by airflow limitation that is not fully reversible . The airflow limitation is usually progressive and associated with an inflammatory response of the lung to noxious particles or gases.

In the UK the National Institute for Health and Clinical Excellence (NICE) defines COPD as

> COPD is characterised by airflow obstruction that is not fully reversible. The airflow obstruction does not change markedly over several months and is usually progressive in the long term. COPD is predominantly caused by smoking. Other factors, particularly occupational exposures, may also contribute to the development of COPD. Exacerbations often occur, where there is a rapid and sustained worsening of symptoms beyond normal day-to-day variations.

The following should be used in the definition of COPD:

> Airflow obstruction is defined as a reduced FEV_1/FVC ratio (where FEV_1 is forced expired volume in 1 s and FVC is forced vital capacity), such that FEV_1/FVC is less than 0.7.
>
> If FEV_1 is $\geq$ 80% predicted normal, a diagnosis of COPD should only be made in the presence of respiratory symptoms, for example, breathlessness or cough.
>
> The airflow obstruction is present because of a combination of airway and parenchymal damage. The damage is the result of chronic inflammation that differs from that seen in ▶ asthma and which is usually the result of tobacco smoke. Significant airflow obstruction may be present before the person is aware of it.

These pragmatic definitions are somewhat imprecise and variably include elements of etiology, pathology, physiology, and symptomatology which are not always coherent. This imprecision should be born in mind when comparing research using different patient populations and by different researchers.

Description

General

The ISOLDE trial published in 2000 represented a landmark in thinking about COPD, its effects, and treatments (Burge et al., 2000). Prior to that, the predominant clinical focus was on pathophysiological effects. The ISOLDE trial examined the effects of inhaled steroids on the rate of decline of FEV_1. No such effect was demonstrated. However, using the St. George's Respiratory Questionnaire to measure health status, steroids were demonstrated to slow the usual decline in health-related quality of life; the point at which a clinically significant decline was reached was deferred by 9 months. Subsequent analysis linked this to a reduction in exacerbation frequency (Spencer et al., 2001).

Since then, much of the clinical literature on COPD has included health status at least alongside pathophysiological outcomes, if not actually as primary end points.

Measurement

Many measurement tools have been employed in COPD.

A distinction should be made between those which are not disease specific and those which are. The former seek to measure overall health status. COPD will partially contribute to this. The latter more specifically assess the impact of COPD on patients. It can be inferred that the latter might be expected to be more sensitive to change, while the former provide a more holistic view of the patient's health status. This does indeed hold true in practice (Puhan, Soesilo, Guyatt & Schünemann, 2006).

General tools may also be useful in allowing some comparisons between diseases and be useful in providing measurements contributing to health economic analyses.

For a review of tools available, see the ATS/ERS task force statement on "Outcomes for COPD pharmacological trials" (Cazzola et al., 2008).

Care needs to be taken in use of the questionnaires. Their intention is to provide objective scores to allow comparison between different groups. However, this presumes a similar linguistic and cultural background of the subjects (El Rhazi et al., 2009). Some tools such as the St. George's Respiratory Questionnaire have been translated and validated in a large number of different languages, conferring them extra usefulness (List of SGRQ translations available from SGUL, 2011). Different tools have different strengths and weaknesses, for example, one study looking at acute exacerbations of COPD found that the ▶ EQ-5D tended to produce saturated responses and the ▶ SF-12 often had missing values while noting that the SGRQ could not give utility values (Menn, Weber, & Holle, 2010). The plethora of tools can give rise to difficulties in comparing studies. They have different sensitivities and thus caution has been urged with regard to meta-analysis; effect sizes cannot be compared with different tools (Puhan et al., 2007).

Factors Contributing to Quality of Life

A summary of factors correlating with quality of life can be found in Tsiligianni, Kocks, Tzanakis, Siafakas, and van der Molen, (2011). These found correlations with measures of HRQoL and gender (women had worse HRQoL), disease severity (as per international classification), body mass index (worse HRQoL with low BMI), smoking, symptoms, comorbidity, depression, anxiety, and exacerbations. They noted a stronger correlation between HRQoL and dyspnea, anxiety, and depression than with FEV_1. Such associations have been used to try to "explain" variations in HRQoL but there are clear pitfalls. There is a difficulty in cross correlation with other scores where results may be tautological.

One area where this is problematic is the contribution of depression and anxiety to HRQoL. Such a relationship has often been reported. However, questions closely related to depression and anxiety are built into many HRQoL questionnaires. For instance, the Chronic Respiratory Questionnaire (CRQ) includes questions on feeling of fear and panic, energy, confidence in coping, tiredness, depression, feeling in control, feeling relaxed and free of tension, being "down in the dumps," being worn out and sluggish, being scared, and being restless, uptight, or anxious (Guyatt, Berman, Townsend, Pugsley, & Chambers, 1987). It would be surprising if scores from this did not correlate with questionnaires intended to examine depression and anxiety, and finding such a correlation adds very little extra information without a considerably more probing analysis.

Similarly it is not entirely surprising that questionnaires correlate better with dyspnea than FEV_1 as questions about dyspnea form a large part of most questionnaires. Generally, no one is asked about their FEV_1.

There are a number of publications looking at gender differences in quality of life in COPD, suggesting that women have a lower HRQoL. There may be a different correlation between physiological variables and HRQoL in men and

women (de Torres et al., 2006). While some more sophisticated studies suggest such differences may indeed be the case, it is conceivable that gender differences in use of language and willingness to report and discuss symptoms could produce differences in measures though an individual's experience is similar.

In attempting to explain HRQoL in terms of contributory factors, the design of the questionnaire becomes crucial. Marked tautologies in this approach have already been described. More subtle biases may also be present. In dissecting out one element and ascribing significance to it one may in fact be reflecting the importance given to that factor in devising the questionnaire, rather than reflecting the subject's true experience. While a well-designed tool will minimize this, there remains a chicken-and-egg problem; if you think an item is important, you will put it in your questionnaire, which in turn means that factor will tend to be apparent when using the questionnaire, so it will appear important. Although there is data suggesting that the CCQ is reproducible and sensitive to change, it was developed by asking experts what they thought important determinants of HRQoL might be and then selecting out from these factors (van der Molen et al., 2003), risking this sort of bias. By contrast the COPD Assessment Tool (CAT) is notable in generating important factors from qualitative ascertainment of patients' own experience of their disease and using mathematical a priori modelling to select factors (Jones et al., 2009).

These considerations are made explicit in the work of Stucki and colleagues (2007). They analyzed the number of different concepts contained in 11 different health-related quality of life questionnaires used in COPD and discovered a total of 548 concepts which they mapped against 60 categories of the International Classification of Functioning, Disability and Health. Only dyspnea was common to all questionnaires, whereas 21 categories were considered unique to specific instruments.

These reservations notwithstanding it is apparent that in general apparently robust instruments measuring health-related quality of life that appear sensitive to change correlate weakly with physiological measures of lung function. This in turn suggests holistic assessment of health and the effects of interventions in COPD are incomplete without an attempt to measure HRQoL.

General Description of Quality of Life in COPD

A large study looked at HRQoL by disease severity in a variety of European countries (Jones et al., 2011). There were similar degrees of impairment in HRQoL in different countries, with progressive impairment of HRQoL with advanced disease status. There was significant impairment even in mild disease. However, within a disease category, there was considerable variation in HRQoL. The BODE score, a combined score using physiological (BMI, exercise capacity, airflow obstruction) and symptomatic (dyspnea) scores, not unexpectedly correlates better with HRQoL than disease stage or FEV_1 alone (Medinas Amorós et al., 2009) as both BODE score and HRQoL measures include an explicit "dyspnea" term.

Subjects with an FEV_1 above the lower limit of normal but with an FEV_1/FVC ratio of below 0.7 have come under scrutiny as COPD is defined. Exercise capacity and exacerbation frequency seem similar yet HRQoL is lower in those with a low ratio that is above the lower limit of normal (García-Rio et al., 2011).

There is a decline of HRQoL over time that correlates poorly with FEV_1 and peak VO_2 (Oga et al., 2007). Interestingly ▶ exercise capacity assessed by the 6-min walking distance is better preserved than peak VO_2 and the former correlates better with HRQoL (Brown et al., 2008). While both HRQoL and the 6-min walking distance decline in populations over time, there is no correlation between the two for individuals (Oga et al., 2007).

The strong negative impact of exacerbations on HRQoL was demonstrated in a review of 18 papers (Schmier, Halpern, Higashi & Bakst, 2005). In those admitted to hospital, risk of readmission is greater in those with a poorer HRQoL (Almagro et al., 2006).

HRQoL has been linked to survival (Marin et al., 2011 and Rivera-Fernández et al., 2006),

though no doubt this is because the same underlying mechanism contributes to each. There is a continued decline of HRQoL at the end of life, but this is gradual and without a point of inflection that allows extra prognostic information (Habraken et al., 2011).

More indirect but important effects have been described. Dropouts from clinical trials tend to be those with worse HRQoL leading to potential bias (Decramer et al., 2011). There has been some research into the effect on health status and quality of life of carers. Although there are reports of detrimental effects (Thöne, Schürmann, Kühl, & Rief, 2011), some general studies of quality of life do suggest a beneficial effect of a carer role (Poulin et al., 2010).

Effect of Interventions on Health-Related Quality of Life in COPD

As noted above, the ISOLDE trial was pivotal in drawing attention to HRQoL as an outcome measure in COPD. It is now considered essential to include such a measure as at least one outcome in interventional trails of COPD. Presented here are some examples of such studies. These examples are not exhaustive and some contradictory evidence exists in some cases, but these examples serve to illustrate areas of interest in COPD.

In terms of evolution of COPD and prognosis, the most important intervention is smoking cessation. As well as this long-term prognostic benefit of smoking cessation, within 12 weeks of enrolling in a smoking cessation program, subjects successful in smoking cessation had an improved HRQoL compared to those unsuccessful in their quit attempt (Tashkin et al., 2011).

Pulmonary rehabilitation (consisting of exercise training usually supplemented by educational sessions) is clearly established as an important treatment modality. It increases exercise capacity, decreases breathlessness, and enhances HRQoL (Lacasse, Martin, Lasserson & Goldstein, 2007 and Moullec, Laurin, Lavoie & Ninot, 2011).

Others have looked at ways of supplementing or enhancing this. Telephone encouragement has been suggested to enhance activity and quality of life in the short term (Wewel et al., 2008) with a suggestion that it may prolong benefits in some CRQ domains after acute rehabilitation (Waterhouse, Walters, Oluboyede & Lawson, 2010). There may be a role for electrical muscle stimulation (Bustamante, López de Santa María, Gorostiza, Jiménez & Gáldiz, 2010). Inspiratory muscle training either as a primary or adjunctive therapy has also been shown to have beneficial effects on HRQoL (Geddes, O'Brien, Reid, Brooks & Crowe, 2008). By contrast the use of anabolic steroids (Sharma et al., 2008) and creatine (Al-Ghimlas & Todd, 2010) have no beneficial effect.

The complexity of changes taking place during pulmonary rehabilitation is apparent by examining HRQoL in more detail. Two studies have looked at improvement in HRQoL and found no correlation with improvements in exercise capacity for individuals (Bailey, Brown & Bailey, 2008 and Haave, Hyland & Engvik, 2007). A BMI >25 and PaO2 of <60 mmHg independently predicted improvement of the 6-min walking distance after pulmonary rehabilitation but not improvement of quality of life (Vagaggini et al., 2009). Neither HRQoL nor increased exercise capacity correlated with increased activity levels (Mador, Patel & Nadler, 2011). The trajectory of improvement in HRQoL is different from the improvement of exercise capacity; the former plateaus early, while the latter continues to improve (Verrill, Barton, Beasley & Lippard, 2005 and ZuWallack et al., 2006). Ongoing maintenance continued to increase exercise capacity without commensurate improvement in HRQoL (Ringbaek, Brondum, Martinez, Thogersen & Lange, 2010). The rationale for the use of pulmonary rehabilitation is to correct physical deconditioning consequent on the disease. The reason for the disconnect between changes in exercise capacity and change in HRQoL is unknown.

A plethora of pharmacological interventional studies examine HRQoL. The long-acting antimuscarinic agent tiotropium has been extensively analyzed and reviewed (Yohannes et al., 2011; Kaplan, 2010) as well as being studied in one of the pivotal studies in COPD (Tashkin et al., 2008). It produces improvement in lung function, reduces exacerbation frequency, and

improves HRQoL in a sustained fashion. Further analysis has suggested that the benefit in HRQoL is closely related to the decrease in exacerbation frequency (Anzueto, Leimer & Kesten, 2009). Some have suggested that it has a particular HRQoL benefit in COPD patients with an emphysematous phenotype as opposed to those with a non-emphysematous phenotype who benefit differentially from the long-acting beta$_2$ agonist salmeterol (Fujimoto et al., 2011). The phenotype of the beta$_2$ receptor has perhaps surprisingly been correlated with FEV_1 response to tiotropium and also with the HRQoL improvement that is produced. On the other hand, other studies have found a disconnect between acute reversibility and subsequent improvement in HRQoL, suggesting that the relationship is complex (Hanania et al., 2011).

Long-acting beta$_2$ agonists have been assessed more in combination with inhaled steroids than alone, but reviews do show that agents such as salmeterol, formoterol, and indacaterol all have beneficial effects on HRQoL (e.g., respectively, Chen, Bollmeier & Finnegan, 2008; Hui & Chung, 2011; and Cheer & Scott, 2002. Also, see Cochrane Review by Appleton et al., 2006).

The Cochrane Review by Nannini and colleagues suggested that addition of inhaled corticosteroids to long-acting beta$_2$ agonists decreased exacerbation frequency and improved HRQoL (Nannini, Cates, Lasserson & Poole, 2007). A health economic analysis found that the addition of salmeterol and inhaled corticosteroid treatment to treatment with tiotropium produced some enhanced HRQoL benefit but questioned whether this was a cost-effective option (Najafzadeh et al., 2008). A recent review of the effects of inhaled steroid and LABA versus LABA combinations concluded there were benefits in lung function, exacerbation frequency, dyspnea, and HRQoL for the combination product but also drew attention to potential side effects of steroids, particularly pneumonia (Singh & Loke, 2010).

The role of mucolytics was recently reviewed and HRQoL was felt to be enhanced (Decramer & Janssens, 2010). Although phosphodiesterase inhibitors do decrease exacerbation frequency, a Cochrane Review found that effects on HRQoL are present but modest (Chong, Poole, Leung & Black, 2011). These may be because of the side effect profile of these agents, particularly gastrointestinal side effects.

Long-term oxygen therapy has been a mainstay of treatment of COPD for its beneficial effects on prognosis but there is also evidence that patients have a HRQoL benefit (Eaton et al., 2004). Patients reaching the criteria for long-term oxygen therapy had an improvement in quality of life following its provision. Those referred for oxygen therapy who did not reach criteria for treatment were used as a comparator group and showed no parallel improvement.

A systematic review of long-term noninvasive ventilation for stable COPD suggested this had a beneficial effect on HRQoL (Kolodziej, Jensen, Rowe & Sin, 2007). Subsequent studies have produced contradictory evidence. One year-long study suggested a benefit (Tsolaki et al., 2008). However, a large Australian study suggested that though there was a prognostic benefit this was at the cost of worsening HRQoL (McEvoy et al., 2009). One problem with trials of NIV is the diversity of patient selection, often with inclusion of patients with minimally elevated pCO_2 where symptomatic benefit might be modest and be a poor trade for discomfort of treatment.

As discussed above, exacerbations are related to a decrease in HRQoL, and reductions in exacerbation frequency are related with an improvement of HRQoL. A prospective observational study in which patients recorded their symptoms suggested prompt exacerbation treatment was associated with less HRQoL perturbation and more rapid resolution (Wilkinson, Donaldson, Hurst, Seemungal & Wedzicha, 2004). Patients who do exacerbate may benefit from the option of a hospital-at-home service rather than admission to hospital (Aimonino Ricauda et al., 2008).

Surgical treatment with lung volume reduction surgery has been shown to have a quality of life benefit for those with diffuse emphysema surviving to 90 days postsurgery (though there is an excess mortality before this) (Tiong et al., 2006). The NETT trial demonstrated more

marked benefits in subgroups of patients defined post hoc (Naunheim et al., 2006). Recently small studies have suggested that bronchoscopic volume reduction surgery may increase HRQoL (Sterman et al., 2010 and Venuta et al., 2011).

Low BMI has already been noted to be associated with a poorer HRQoL; successful dietary supplementation seems to improve this (Weekes, Emery & Elia, 2009). Surprisingly some reports suggest no relationship between HRQoL and muscle depletion (Verhage, Heijdra, Molema, Vercoulen & Dekhuijzen, 2011).

More general strategies have also been evaluated from a HRQoL point of view. Those given repeated instruction on taking their inhalers demonstrated not only an improved adherence to therapy but also an increased HRQoL (Takemura et al., 2011).

Systematic reviews have also suggested that complex multidisciplinary chronic disease management also improves HRQoL (Lemmens, Nieboer & Huijsman, 2009, Niesink et al., 2007 and Peytremann-Bridevaux, Staeger, Bridevaux, Ghali & Burnand, 2008).

On the other hand, a Cochrane Review failed to show benefit of action plans with limited education on HRQoL (Walters, Turnock, Walters & Wood-Baker, 2010). Three-monthly spirometry and GP review also failed to improve HRQoL (Abramson et al., 2010). While some claims of benefit have been made for telehealth in terms of admissions to hospital and need for healthcare contacts, these have not been shown to translate through to demonstrable benefits in HRQoL (Lewis et al., 2010). A Cochrane Review of nurse-led interventions suggested that though there was a beneficial effect on HRQoL, the effect on admission frequency was sufficiently variable that a conclusion could not be reached (Wong, Carson & Smith, 2011).

Finally, very technical treatments such as stem cell infusion (Ribeiro-Paes et al., 2011) and very simple treatments such as singing therapy (Lord et al., 2010) have also been reported as having positive effects in small studies. Retinoids have been reported to have small effects on HRQoL though effects on pulmonary function could not be detected (Roth et al., 2006). On the other hand, rollators seem excellent in the exercise laboratory in improving exercise efficiency without producing an improvement in HRQoL when used in practice (Gupta, Brooks, Lacasse & Goldstein, 2006).

Summary

Measures of HRQoL are well established in assessment of COPD. Their use can tell us much about interventions in the disease and provide some useful and at times surprising insights. They help dissect out the effects of disease as it really affects patients and set physiological and other measures in context. At the same time, care and common sense need to be used to ensure they are applied correctly and to avoid producing inadvertently misleading results.

Cross-References

- Anxiety
- Chronic Obstructive Lung Disease (COLD)
- Cigarette Smoking and Drinking
- Exercise
- Health-Related Quality of Life Questionnaire Readability
- HRQoL
- Quality of Life Questionnaire for Respiratory Illness
- Training

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Chronic Stress

▶ Burnout

Chronotype

▶ Morningness, Eveningness, and Life Satisfaction

Church and State

▶ Democracy and Islam in the Middle East

CIC

▶ Community Indicators Consortium

Cigarette Smoking and Drinking

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Synonyms

Addictive substance abuse; Health behavior; Health-related quality of life; Lifestyle health risks; Use of stimulants

Definition

The negative effect of excessive and addictive substance use on the ▶ quality of life is well documented in the literature. Most research distinguishes heavy from moderate use of cigarette smoking, alcohol, or drugs. Definitions for being a heavy drinker or smoker are elaborated in the literature based on the frequency of use in a particular time period (day, week) such as 20 cigarettes per day, one (women) or two standard drinks (men) per day or 5–14 drinks per week, and binge drinking (more than four or five drinks within 2 h). A standard drink contains 14 g (0.6 oz) of alcohol and is found in 12 oz of beer (0.34 cl) or 5 oz of wine (14 cl).

Description

There is ample evidence that ▶ health behavior in the form of substance use and subjective

well-being are strongly associated, although the causality between the two can be questioned while being endogenous. Do people smoke or drink because they are unhappy, or does (addictive) substance use lead to unhappy people? In the case substance use is the consequence and not the cause, it is plausible to argue that ▶ happiness prevents people to become ill or to pursue unhealthy behavior such as excessive use of stimulants such as smoking and drinking. Veenhoven (2012), reviewing the empirical literature contained in the ▶ world database of happiness studies, found support for this line of reasoning. In the database 59 studies are reported on the use of stimulants and happiness among which 18 studies on alcohol use and 16 on tobacco use. The studies usually report a U-shaped or J-shaped relationship between alcohol use and happiness and subjective health and well-being. A positive relationship is found at low levels of substance use and a strongly increasing negative relationship with excessive and addictive substance use. In a paper reviewing the evidence since 1980 on the impact of moderate drinking on subjective mental health, El-Guebaly (2007) found a J-shaped curve with positive health reports with moderate drinking but not with heavier drinking. Moore (2009), using the longitudinal data of the British Household Panel Study while correcting for unobserved heterogeneity (personality traits, motivations), found robust evidence that reducing daily cigarette smoking increases the happiness of smokers. As the title already indicates, the author acknowledged the possibility of reverse causality by stating that happy smokers tend to smoke less. Headey, Muffels, and Wagner (2010) using the German Socio-Economic Panel Study covering 24 years of observation, found negative correlations of heavy smoking and drinking with subjective well-being while correcting for unobserved heterogeneity (personality traits).

In the case substance use is the cause of feelings of happiness or unhappiness, a change in substance use (smoking, drinking and drugs) associated with public policy can increase the level of happiness in society. A way to study the causal effect of substance use and to circumvent endogeneity is to rely on data on the effects of cigarette taxes or smoking bans in bars and restaurants on subjective well-being as introduced in many countries including the USA. A recent study by Brodeur (2012) on these bans in the US provides supportive evidence on the link between smoking bans in bars and restaurants and increases in happiness. The rational addiction model of Becker and Murphy (1988) based on the balancing of long-term costs and short-term pleasure would predict that smoking bans reduce the subjective well-being of smokers because it reduce their short-term pleasure to smoke because of the reduced availability of places where people used to smoke. The rational addiction model therefore predicts that smoking policies tend to reduce happiness. Gruber and Koszegi (2001) already showed that cigarette taxes reduce unhappiness while acting as a self-control device because smokers cannot quit smoking due to being addicted. The tax creates an incentive for smokers to quit.

The earlier-mentioned study of Brodeur (2012) also supports the "happiness economics" thesis of Frey and Stutzer (2007) who challenged the rational addiction model by showing that people do not behave necessarily rational with respect to addictive behavior because the relationship between bans on smoking and quality of life effects is influenced by the way these bans influence self-control. Smoking bans just like cigarette taxes tend to raise the self-control of smokers, therewith positively affecting the relationship between smoking policies and life satisfaction. Smoking bans also have the effect that they reduce the prevalence of smoking among the smokers' peers increasing therewith the disutility of smoking, making it easier to quit.

However, a study among 1,600 undergraduate students (Hsu and Reid 2012) showed that binge drinking (see the "Definition" section) appeared to have a positive effect on the life satisfaction and social satisfaction with the campus life of these students. This is found to be with the high social status associated with binge drinking. The social context either due to reference or peer group behavior or to social status effects appears

important to understand the relationship between substance use and subjective well-being.

To date most empirical research on the relationship between smoking or drinking and life satisfaction seems to be conducted in psychology and economics and much less in sociology. There is scope for research into the impact of the social context on the relationship between substance use and the various domains of life satisfaction (work, financial situation, family life). There is also need for longitudinal research to study the short-term and longer-term effects of substance use and to better unravel the complex causality issues involved.

Cross-References

- ▶ Happiness
- ▶ Health Behavior
- ▶ Peer Group Comparisons
- ▶ Quality of Life
- ▶ Subjective Health and Subjective Well-Being
- ▶ World Database of Happiness

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Circadian Preference

▶ Morningness, Eveningness, and Life Satisfaction

Circadian Typology

▶ Morningness, Eveningness, and Life Satisfaction

Circumpolar Indigenous Peoples

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Definition

Indigenous peoples can be identified in different ways: self-identification exists and coexists in "negotiation" with others, these being, first of all, the state and state authorities.

Description

Who Are the Indigenous Peoples?

There are a number of ways to identify who are the indigenous peoples of the Circumpolar Region. One of the most obvious would be to include only those who are represented by the

Permanent Participants of the Arctic Council. This would, for example, include the Aleut people but exclude some peoples living on the Alaska mainland, but north of the Aleutian Chain. Another option would be to follow the ILO Convention 169 ("Convention Concerning Indigenous and Tribal Peoples in Independent Countries"), which gives priority to self-identification and to those who, furthermore, "...are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions" (Article 1b). This would, for example, include the Komi people but exclude the Karelians. The Declaration on the Rights of Indigenous Peoples as adopted by the United Nations in 2007 gives deliberately no definition, but during the process of its adoption by the UN an open-access approach was accepted. In practice, this implies that indigenousness is *identified* on location and in its social, political, and historical context. In the Circumpolar Region it means that indigenous peoples are identified in a combination of geographical and political factors. This implies that indigenous peoples living in geographically non-Arctic regions in some instances should be included if they are inhabitants of an Arctic country. This could include the Komi as well as the Yakut but exclude the Buryat although all three groups enjoy some kind of autonomy within the Russian state.

Self-identification exists and coexists in "negotiation" with others, these being, first of all, the state and state authorities. In this respect, the process of recognition of the rights of indigenous peoples has followed different tracks. In Alaska, indigenousness took its form by the Alaska Native Claims Settlement Act that gave recognition to a number of regional and village-based entities. In Canada, years-long negotiations between the state, the provinces, and the designated aboriginal peoples' organizations resulted in the establishment of land claims agreements and regional autonomies. In Greenland, Home Rule was negotiated between the Danish state and the public (not ethnic) Greenland Provincial Council, and self-government was later established as an outcome of negotiations between the Danish state and the Home Rule authorities (not ethnic). In the Nordic countries, the governments recognized the Saami organizations as representing the Saami people in negotiations, which resulted in the establishment of ethnic autonomies (Saami Parliaments). In Russia, recognition of indigenousness in the form of various types of autonomies dates back to the 1920s' Soviet Regime, and the modern recognition – or lack of same – can be seen as a continuation of this policy.

Conflicts between indigenous peoples of the Circumpolar Region concerning indigenousness are relatively uncommon. By and large, the indigenous peoples recognize each other as indigenous and the claim for indigenousness as a legitimate claim. This is important because the more controversies over this issue there have been, the weaker have the indigenous position been vis-à-vis the governments. Mutual recognition is thus part of the political success of the Inuit of Nunavut compared to the indigenous peoples of Northern Quebec, to mention only two examples. Another factor is, obviously, the numerical numbers which has left the Saami in northern Finland much weaker than the Saami of northern Norway although both groups make up a substantial part of the population in their respective home areas, again only to mention two examples.

In 1973, indigenous peoples organized for the first time a Circumpolar conference. The Arctic Peoples Conference (see Dahl, 2009) took place in Copenhagen and was important for the establishment of the Inuit Circumpolar Conference (now: Inuit Circumpolar Council) a few years later and also for the organizational efforts of the Saami. At that time, the indigenous peoples of the Soviet Union were unable to participate. Experiences from negotiations with governments were extremely important for the international efforts and status of the indigenous people of the Circumpolar North. The indigenous peoples of the North were goal oriented, and they learned

to use a wide variety of means, to reach these without losing sight of the aims when compromises were made. Sometimes they shamed the governments by playing the game of the mouse against the elephant; at other times, they dragged the process out for years, they were skilled in the creation of alliances within the political and administrative establishment, and they learned to turn any negotiation into a win-win result (see Abele and Rodon, 2007; Dahl, 2012). Such factors were important for the Circumpolar indigenous peoples to play a key role in the international human rights efforts of indigenous peoples in the United Nations, such as the establishment of the Permanent Forum on Indigenous Issues and the adoption of the Declaration on the Rights of Indigenous Peoples. Obviously, some indigenous people of the Circumpolar North have given priority to regional or national processes to reach their political, economic, or environmental aims, but there is little doubt that the international indigenous movement has looked to the North to be inspired by what have been achieved there.

Types of Self-Government

Self-determination or self-government is a goal aspired to by all indigenous peoples of the Circumpolar North, and all Arctic states have accepted some degree of indigenous autonomy. Each type of autonomy reflects specific demographic, political, cultural, and historical circumstances and the options available. For the matter of clarity, we can distinguish between regional self-government, ethno-political self-government and land claims agreements. In some cases, we see these categories combined, reflecting specific historical, political, and demographic complexities.

Regional self-government is defined in relation to a territory and no ethnic group is given preferential rights. It seems as if indigenous people will give priority and seek this solution when there is an option for carving out a defined territory in which they make up a majority of the population. Another general rule seems to be that indigenous peoples will seek to establish regional self-government units in as large a territory as this is possible. In Alaska, this is reflected in the establishment of North Slope Borough and Northwest Arctic Borough; in Canada, Nunavut was carved out in this way, and the Greenland Home Rule and later self-government have been defined on basis of the undivided Greenland territory. Regional self-governments are in the Circumpolar North headed by public governments. The autonomous republics, areas, and districts established as early as the 1920s in the Soviet Union (Russia) could be seen as types of regional self-government, but they were rather delegated than negotiated, and indigenous peoples soon became numerical minorities in their own homelands. These titular nationalities are, however, important in the political strategies adopted by the indigenous peoples and as symbolic entities in identity construction.

Ethno-political self-government assigns specific rights to specific groups of indigenous peoples. In this case, the indigenous peoples are conceded specific rights, which are not given to the immigrant population. This form of autonomy typically reflects that the indigenous peoples are in a minority situation within a given territory. The establishment of Saami Parliaments in Norway, Finland, and Sweden is an example of ethno-political self-government. Preferential rights can be given to members of the indigenous group even in case that they reside outside their cultural homeland. Voting rights to the Saami Parliament for Saami living in southern Norway is an example of this. In Alaska, we find ethno-political self-government at community level. For example, besides having regular village council with a council elected by all the inhabitants, the same community may have a tribal council elected by the Natives only. At the regional level in Alaska, there may be Native Associations with no political rights but vested with delegated authority in matters such as health, culture, and social welfare.

Land claims agreements entered between indigenous peoples and the states refer to specified territories, but are far more limited in scope than territorial self-government. The main focus of a land claims agreement is on economic ownership rights ("fee simple title") to selected territories. The first land claims agreement in the

Circumpolar North was the Alaska Native Claims Settlement Act (ANCSA) that established 13 regional corporations and more than 200 village corporations which became owners of the land and administrators of compensation money. ANCSA gave no preferential cultural, political, or social rights to the indigenous peoples. The Nunavut agreement was a comprehensive agreement, which included the establishment of a public Nunavut government and a land claims agreement for Inuit only, and it came to include a number of preferential and benefit agreements.

Indigenous Organizations

Political organizations based on ethnicity are a fairly recent phenomenon in the North. Cultural, social, and economic associations and cooperatives have in many places preceded political organizations, but these were locally founded and worked for the promotion of common interests rather than ethnicity. But the rush for resources in the North and the integrationist policy promoted by all circumpolar governments lead to profound changes in the political climate. Oil and gas had been found in 1968 on the North Slope of Alaska and plans developed for building a gigantic hydroelectric scheme at James Bay in Arctic Quebec to mention only two examples. Similar developments occurred in the Soviet Union, Scandinavia, and Greenland, and the indigenous peoples were those who would experience all the negative effects of economic development, integration, and assimilation.

In the late 1960s and first half of the 1970s, aboriginal people and ethnic minorities came together on a regional level and set up transnational regional organizations, now centered around the concept of being indigenous. To give some examples (see also Dahl, 2012), the National Indian Brotherhood in Canada was formed in 1968 to represent the Status and Treaty Indians; the *Inuit Tapirisat of Canada* was founded in 1971 and organized Inuit in all provinces and territories. Although other organizations with an ethnic profile had been previously established, such as the Saami Council (1956), representing Saami people in Norway, Sweden, and Finland, and the Alaska Federation of Natives (1966), it was only in the 1970s that new opportunities for linking local, national, and international efforts appeared. One example is the Inuit Circumpolar Council (ICC) (1977), and another is the Russian Association of Small Peoples in the North, Siberia, and Far East (RAIPON), established in 1990.

For several decades, the indigenous organizations have been the most important civil society actors to promote equal rights of the ethnic minorities in the North. The exception is Greenland where political parties modeled in the same way as their counterpart, the Danish political parties, took up ethnic issues. The Greenland political parties are represented in the Greenland and Danish parliaments, but in all other countries of the North, indigenous peoples have joined national political parties to become represented in the national parliaments. But the social, environmental, political, and cultural agendas taken up in the national parliaments have been formed by the indigenous or other locally based organizations.

Livelihoods

Ethnicity was the prime mover for the promotion of political, civil, and social rights of the peoples of the Circumpolar North. As a result, indigenous peoples exert control of their own destiny in many parts of the North. Ethnicity or indigenousness, however, is not always the best fundament to implement matters ranging from subsistence issues, gender equality, education, or other matters of daily life. Knowledge about, for example, the social and environmental effects of uranium mining is not associated with ethnicity but is the sphere of experts or persons who have invested an enormous amount of time on this issue specifically. Such knowledge is most often not available, neither to the indigenous organizations nor to the numerically small communities of the North.

In the first instance, ethnicity created consensus among those who were marginalized in the North. In the second instance, the subalterns became proactive participants of their own future. The ethnic movements turned people from onlookers to stakeholders, and in the second

phase, people turned from stakeholders to participants and rights holders. This process has probably created the most important fundament for increased well-being because it turned subservience and victimization to proactive responsibility. Turned into practicality, this process has taken numerous forms: the establishment of healing circles among indigenous groups in Alaska who take up controversial issues such as sexual abuse of children, the creation of women's shelters in Greenland, organizing indigenous negotiation teams with oil companies in Russia, participation in comanagement regimes when Nunavut was established, creating political parties who can draw up steps in the development of democratic institutions, etc. The point is that in the Circumpolar North, an enormous amount of such practical initiatives have been rooted in ethnic or indigenous movements, which created the organizational platforms and which turned dissatisfaction to civil society initiative – in itself contributing to the creation and development of collective well-being.

Indigenous organizations still play an important role in bringing local issues to the knowledge of the international community such as the ICC who had great success in bringing environmental issues on the agenda of international human rights instruments. Others have transferred international standards into local consideration, such as the Saami Council who was instrumental when Norway took up and ratified the ILO Convention 169.

The Arctic Social Indicators report (Larsen, 2010) gave a number of entries into how increased well-being can be measured, including language retention, surface land controlled by the inhabitants, and economic participation. In 2012, however, the main challenge to the populations of the Arctic including the indigenous peoples and to the political constructions established between the 1970s and the early 2000s seems to come from the outside. This is a challenge to the fate control, which can be experienced at the personal, household, community, and regional levels. For years, decades, and even centuries, many areas of the Arctic have depended on outsiders, who played a major role in administering political, economic, and cultural institutions even at the local level and notably at higher scales. Boom-bust economic cycles characterize large parts of the Arctic, with concomitant high unemployment and underemployment in many regions and dependence on transfer payments.

While the planned construction of major development projects (Arctic Pilot Project, the Mackenzie Valley Pipeline project, the James Bay hydroelectric scheme, the Prudhoe Bay oil discovery, etc.) was a key instigator for the indigenous peoples of the Arctic to organize themselves and thus to come into control, similar projects (uranium mining in Nunavut, iron ore and aluminum production in Greenland, High Arctic sea routes, oil and gas development in the Russian North, etc.) challenge the indigenous peoples' collective notion of well-being as linked to any kind of authenticity including living close to nature. Until today, outsiders have always been those in control and those who threatened the control of the local indigenous populations, but with the prospects of having thousands and thousands of, for example, Asian people to become laborers in the Arctic extractive industries, this raises completely new challenges to the concept of collective well-being and fate control.

Cross-References

- ▶ Alaska, Living Conditions of the Inupiat
- ▶ Arctic, Quality of Life
- ▶ Arctic Human Development Report (AHDR)
- ▶ Arctic Social Indicators (ASI)
- ▶ Climate Change, Arctic
- ▶ Globalization, Arctic
- ▶ Human Development, Arctic
- ▶ Informal Economy, Arctic
- ▶ Material Well-Being, Arctic
- ▶ Nunavik
- ▶ SLiCA, Survey of Living Conditions in the Arctic
- ▶ Subsistence in the Arctic

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Circumpolar North

▶ Arctic, Quality of Life

Citation Classics

▶ Social Indicators Research

Cities, Characteristics of

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Synonyms

Metropolis; Neighborhoods; Towns

Definition

The city is a large and stable agglomeration of people characterized by a local administrative and legal status. There are no fixed thresholds in terms of population size in order to distinguish between metropolis, cities, towns, and villages. The size of populations living in what is considered a city can be very different according to different criteria for defining a city, including population size; administrative functions; socioeconomic, political, and religious functions; and historical conventions. Of course, the historical evolution and size of the cities (Bairoch, Batou, & Chèvre, 1988; Hohenberg & Lees, 1985; Rokkan, 1973) changes country by country.

Description

In 2006 for the first time in human history, the number of people living in the cities was larger than the number of people living in rural areas. This was the result of an interrupted process of ▶ urbanization which today makes it difficult to understand what a city really is. Although it is possible to recognize the administrative boundaries of a city, it is much less obvious how to distinguish between urban and nonurban areas. The sprawl of the city, the increase of the metropolitan areas and satellite cities, and the extension of the transport systems contribute to creating a pervasive urban context, not only from a physical point of view but also from a cultural one. Globalization and urbanizations seem to be two phenomena strongly linked to each other. However, research on quality of life in the cities is significant as far as is it still possible to compare living conditions in distinctive metropolis, cities, towns, and rural villages within and between different countries.

Normally, contemporary cities are burdened by several problems including pollution, criminality, and loneliness, but at the same time, they still are the places where job and leisure opportunities are higher. In investigating living conditions in the cities, we have to consider all the classical domains we look at for quality-of-life research, but we also have to examine more carefully the question of whether urban problems and amenities are still concentrated in the cities or are widespread according to the urbanization process. We have here the first important question to answer: Do we have specific concerns

regarding quality of urban life? For example, can we assume that criminality and pollution are mainly urban problems and therefore that we should study these domains more than other concerns like leisure, health, and wealth. Normally, there are no evident differences between quality of life research and quality-of-urban-life research in terms of concerns.

For studying living conditions in the cities, we need statistical information (objective and ▶ subjective indicators) for different territorial units, including data at the neighborhood level if we want to analyze internal disparities.

Despite several methodological constraints, the research on quality of urban life generates a growing interest. As a matter of fact, cities become the most important actors in the ongoing process of globalization; they are the engine of the countries' socioeconomic development and, at the same time, they are more and more independent from central authorities and policies. Local welfare, city networks, urban accessibility, and openness are relevant concepts in the analysis of the modern urban society and ask for a deeper investigation of the relationships between the quality of urban life of resident and nonresident populations.

Cross-References

- ▶ Commuting
- ▶ Italy
- ▶ Milan, Quality of Life
- ▶ Urban Life, Quality of
- ▶ Urbanization

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Cities, Sustainable

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Synonyms

Green cities

Definition

A *sustainable* city is one that meets the criteria of sustainability, reducing the consumption of nonrenewable energy and materials and the various forms of pollution it produces. At the same time, from the environmental perspective, a sustainable city is attentive to the quality of life and to social equity and cohesion.

Description

The concentration of many human beings in a confined space already caused problems in the past (the term *smog* dates to 1544), which were then aggravated by the industrial revolution and the unsanitary conditions, pollution, and social deprivation often described by scholars and novelists. Today the city looks like an energy-intensive monster, ravaged by conflicts and contradictions, marked by serious environmental problems (pollution, waste, traffic, etc.) and by large areas of human and urban degradation invested as it is by profound physical, spatial, economic, and social changes (Bauman, 2002, 2003; Sassen, 2000, 2001; Worldwatch Institute, 2007).

At the same time, together with the city developed the myth of the *ideal city* imagined by architects and philosophers, fruit of the genius of urban planning and a harmonious coexistence among all its inhabitants and/or (as we have tried to do ever since the nineteenth century) by the presence of green spaces that evoke the countryside and nature.

Population growth and economic and technological development, however, have produced two types of urban environmental impact and two extreme situations from the socioeconomic perspective, in a framework that is still evolving and very uneven, with strong differences due to the size of the cities and the nations in which they are located:

1. From an environmental point of view, on the one hand, the city consumes material and energy and causes the greenhouse effect and air, water, noise, and light pollution. On the other hand, it consumes land, especially in the forms of *urban sprawl* (European Environment Agency [EEA], 2006) and *suburbanization*.
2. From a socioeconomic point of view, the two extreme situations are those of the cities of industrialized countries, which, for example, have public transport systems and services for managing waste and efficient sewers, and the very large cities of less developed (but rapidly "emerging") countries, characterized by chaos and pollution and often surrounded by vast expanses of *slums* but also marked by a tumultuous quest for prosperity and approval of a lifestyle and urban and architectural models typical of more industrialized countries.

The picture, of course, varies widely depending on the size of the towns and cities (small, medium, large) and the socioeconomic, cultural, geographical, and political will and capacity of public administrators (Keivani, 2010). One must also take into account the changes in the social and ethnic composition of the cities, the changing functions of urban centers, and the overwhelming transformation of these urban landscapes.

In any case, the development of policies aimed at sustainability of urban environments has become increasingly urgent in the face of the continuing growth of the urban population.

In fact, by now more than 50 % of the world's population lives in urban areas, and this will become 70 % in 2050 (UN-HABITAT, 2010). The inequalities in the urban areas (measured on the basis of the Gini index) are generally greater than in rural areas, and slum dwellers are on the rise (UN-HABITAT, 2010).

The concept of sustainable cities is part of the broader sustainability and is central to the numerous conferences on general issues of sustainability that have been ongoing since 1972 (United Nations Conference on the Human Environment, Stockholm, 5–16 June 1972) and specific conferences and initiatives.

There are networks of sustainable cities and recognition of the most "virtuous" cities.

For the European Union (European Commission, European Green Capital Initiative, http://ec.europa.eu/environment/europeangreencapital/about-the-award/index.html), for example, a green city must meet the following criteria:

- Has a consistent record of achieving high environmental standards
- Is committed to ongoing and ambitious goals for further environmental improvement and sustainable development
- Can act as a role model to inspire other cities and promote best practices to all other European cities

The classifications of quality of life in the cities are drawn up by various organizations including a consideration of environmental factors. It is increasingly clear that there is need for "unifying quality of life and sustainability" through "integrated urban management" (EEA, 2009, pp. 9, 93).

Holistic Approach to Sustainable Cities

Studies on urban sustainability show how environmental sustainability alone is no longer sufficient today. In fact, it is becoming necessary to have an awareness of the city in both a physical and social sense, that is, a city will only be sustainable when it becomes compact, open to civic participation, supportive, and eco-managed (Salomone & Messina, 2011).

The sustainable city, in fact, is not only a city with efficient environmental services – it can be clean, neat, livable, yet at the same time have a high ecological footprint as indeed happens in "affluent" societies, with the appropriation of natural resources to the detriment of those cities with a smaller footprint – but also with internal

social inequities and consequent negative impacts on the quality of life of the inhabitants themselves.

Therefore, the concept of the sustainability of a city calls into question not only local environmental management and the relative efficiency in the use of natural resources but also the absolute levels of such use. In short, it is a matter of paying attention to the limits of the planet, on the one hand, and the fairness of distributing these resources, on the other, as well as to the social, cultural, and governance issues such as reserving space for widespread creativity and to processes of citizen sharing and participating in daily choices, especially in important strategic choices.

In the face of profound and sometimes sudden changes and transformations, strictly regulating urban space may not be effective. Instead, it may be necessary to develop actions that experiment with new forms of social relations, of coexistence, and of new ways to satisfy people's desires.

To perform this type of intervention requires a transdisciplinary approach that encourages dialogue between the different competencies within society.

Overcoming the oxymoron of a sustainable city is also about building a renewed relationship between humans and nature by developing more conscious and active citizenship that is more participatory and democratic, where sense of responsibility and collective action are based on a deeper ethic that enhances socioeconomic systems and more sustainable production and consumption, or even that which is fairer and more ecological (Donzelot, 2006).

The most interesting experiments in sustainable cities are not the ones that focus only on technological solutions, but those that try to go a different route so that as a result of the active and critical role of individuals, the cities become conscious communities, places of active citizenship, of the repossession of public space, and of the full expression of human, civil, and social rights.

In this sense, the concept of sustainable city must certainly involve the most central heart, the important sites of the city, but also create widespread and balanced opportunities in the subcentral and suburban areas, ensuring opportunities for citizens at different times of the day and in different periods of life, constituting an antidote to the fear that can cause one to escape from the city towards residential suburbs.

The sustainable city needs to preserve and enhance the multifunctional character of urban centers.To meet this challenge it is essential to have a strategic approach to determine the characteristics of infrastructural networks consistent with the settlements, to develop functional synergies that are capable of influencing the quality of life and the environment.

Networks of the urban mobility of people and goods, in fact, cannot be considered only as works to enhance the provision of a service or growing employment or the creation of market income, but must represent important basic resources to organize the territory and achieve sustainable mobility for the city.

The plan of the sustainable city is, contemporaneously, both a point of intersection of different themes of inclusiveness and a symbol of the city. In fact, the theme of the inclusive urban community is the ability to hold together symbolic and political dimensions. At the same time, the design of a sustainable urban space stems from the need, above all practical, to guarantee social relations. In both cases, it is a question of meanings and needs that are changed over time in relation to historical conditions.

Cross-References

- ▶ Ecological Footprint
- ▶ Transition Towns
- ▶ Urban Ecology
- ▶ Urban Sprawl

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Citizen Action Groups

▶ Community-Based Participatory Research

Citizen Oversight

▶ Community Participation

Citizen Participation

▶ Community-Based Planning

Citizen Participation and Bottom-Up Planning

▶ Community-Based Planning
▶ Community Participation

City and Regional Indicators

▶ Urban Sustainability Indicators

City Beautiful Movement

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Synonyms

City beautiful urbanism

Definition

The City Beautiful Movement (CBM) is an urban movement that first initiated comprehensive ▶ community planning actions in North America; it influenced American city plans and planning activities from the 1890s to the 1910s. It set up the principles of the vision of an ideal city (Loukaitou-Sideris & Banerjee, 1998) and ▶ beauty in architecture and planning. In this period, due to fast-paced industrial growth, American cities were in chaos and had poor quality of urban life. In response to poor urban conditions, public decision makers began searching for comprehensive solutions that could improve the quality of the built environment in the city.

Description

The announcement of World's Columbian Exposition in Chicago in 1893, after a devastating fire that had destroyed most of the city some years earlier, marked the beginning of a movement that helped initiate ▶ city planning in North America. With its large-scale Beaux-Arts monumental structure and emphasis on the mutual relationship of ▶ beauty and utility in ▶ urban design, the exposition captured international attention. The exposition was designed to outperform other expositions in Europe, such as the Paris Universal Exposition in 1889 (Wilson, 1980); its goal was to show the magnificence of American cities and the optimism of Chicago (and other American communities) to the world.

The exposition involved a collection of white plastered monumental public building groups built around one major and several minor axes with ample public spaces embellished by waterscapes and park landscapes (Scott, 1969). The designers, Frederick Law Olmsted, a landscape architect; Louis H. Sullivan, chief of construction and director of works; and Daniel H. Burnham and John Root, project architects and managers, suggested that beautification can increase ▶ quality of life in cities; moreover, urban beautification creates moral and civic virtue within communities by expanding the national economy, strengthening local pride, and leaving a legacy of civic improvements and plans for the future. The goal of the exposition went beyond decoration: its planning process contributed to the recognition of city planning as a municipal activity (Scott, 1969).

The first major application of city beautiful ideas was the 1901 plan for Washington D.C. L'Enfant's original plan for the city in 1791 followed design principles used in the gardens of Versailles (Scott, 1969): Glenn Brown, the secretary of American Institute of Architects, suggested reviving that plan, particularly the arrangement of monumental government buildings around the mall to create a civic center and ordered landscaping designed as an extension of a new city park system. This approach, which perceived design as a part of a larger plan, created a comprehensive scheme with a ceremonial character. The McMillan Park Commission appointed Daniel H. Burnham and Frederick L. Olmsted Jr. to work on the plan for beautifying the city with monumental architectural elements and landscape improvements that befitted the capital of the American Republic (Loukaitou-Sideris & Banerjee, 1998).

CBM also contributed to an interest in regionalism. The city beautiful era saw the design of metropolitan park systems and other public services, such as sewer, highway, and transportation systems in Boston in 1893; the declaration of New York City as a borough that engaged all counties of Greater New York in 1898; and the political union of the villages and unincorporated areas in Chicago (Scott, 1969). Municipal activities were stimulated by this large-scale thinking and planning. Municipalities increasingly promoted beautification through design of malls, promenades, recreational grounds, and civic art. Even small towns and villages set about beautification. Beauty was seen to promote unity and solve urban problems caused by class conflict, thus acting as a tool for improving cities, advancing communities (Wilson, 1980), and encouraging ▶ community cohesion. Olmsted argued that its societal role was to secure a contented workforce, buoyant property values, and civic boosterism (Wilson 1989 in Freestone, 2011). Some "commentators highlighted other goals like nationalism, citizenship, patriotism, good government, economic productivity, ▶ social cohesion, and the ▶ quality of life" (Freestone, 2011, p. 259).

As economic conditions worsened in the early decades of the twentieth century, support for expensive beautification schemes diminished. CBM was criticized for its unrealistic goals, unfair emphasis on aesthetics for city improvement, and incomplete civic center plans that did not offer solutions to urban problems or social issues. Taxpayers began to resist the high costs of monumentalism. Beautification primarily served the interests of local business elites (Freestone, 2011). Some critics noted that the movement excluded the ▶ civic engagement of poor households. After the Second World War, the ▶ garden city movement gained influence in city planning.

Some see the ▶ new urbanism and growing interest in ▶ urban design in recent decades as owing an intellectual debt to the early City Beautiful Movement.

Cross-References

- ▶ Beauty
- ▶ Civic Engagement
- ▶ Community Cohesion
- ▶ Community Planning
- ▶ Garden City Movement
- ▶ New Urbanism
- ▶ Planning, an Overview
- ▶ Quality of Life

- ▶ Social Cohesion
- ▶ Urban Areas
- ▶ Urban Design
- ▶ Urban Life, Quality of

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City Beautiful Urbanism

- ▶ City Beautiful Movement

City Competitiveness and Quality of Life

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Synonyms

Place-based development; Quality of place; Well-being in cities

Definition

Quality of life (QoL) is assumed to be a factor that determines to a great extent location decisions of households and businesses. QoL is used as a tool for place promotion and city marketing policies aiming to put an area on the map. In these terms, it is a part of the profile of a "competitive city," one that is successful in attracting the attention of capital, as QoL factors are influential in terms of urban growth and development. Hence, the improvement of QoL becomes not only a question of social equity but also, and perhaps predominantly, one element of strategies aiming to attract people and investments in certain locations.

Description

QoL has been viewed as an economic good due to its imbedded characteristics. The urban economist Wingo (1973) gives three main reasons for that:

1. QoL is scarce and people are prepared to trade it off with other things that make them as happy, in order to have it.
2. Households and businesses make decisions on where to locate based on QoL considerations.
3. QoL is a public good; community resources need to be allocated to it.

Along the lines of Wingo, Gillingham and Reece (1979) note that QoL at an individual level is the result of the satisfaction the individual achieves as a result of the consumption of market goods, leisure, public goods, and other characteristics (physical and social) of the environment in which it is located.

In mainstream economics, QoL is associated with the concept of social well-being and traditionally has been mainly linked with monetary factors such as GDP, price levels, and cost of life. However, economic thinking moved away from this simplistic vision of QoL towards more complex definitions. The work of economists such as Townsend (1979) and the so-called Scandinavian Welfare Approach (Erikson, Hansen, Ringen, & Uusital, 1987; Erikson, 1993) highlights the multidimensionality of QoL as an economic good. Amartya Sen (1987, 1993, 1997) recognizes income and consumption as components of QoL but places at the center of the QoL concept the possibility (what he calls "capability") of individuals to achieve: "capabilities are (. . .) notions of

freedom, in the positive sense: what real opportunities you have regarding the life you lead" (Sen, 1987, p. 36). Based on Sen's vision, other economists such as Slottje (1991) and Chiappero-Martinetti (2000) highlight issues arising from this multidimensional approach – both in terms of its methodological and theoretical requirements and the complexity of the required information. Moreover, they attempt to operationalize the concept and to measure QoL with the use of indicators and the construction of indices. Other works have also built QoL indices ranking places. As Rogerson (1999) exposes, people loves lists, especially lists which position one place, one person, one above the other. There are popular rankings, such as the Places Rated Almanac, a serious attempt to popularize a statistical ranking of US metropolitan areas, Fortune Magazines's ranking of the world's best cities, and the Cushman & Wakefield European Cities Monitor. It has to be said, though, that some of these city rankings are designed to capture the opinion of corporate occupiers. Consequently some of these rankings reflect the senior executives' view on leading business cities and particularly on their own vision of QoL.

There is considerable convergence of opinion in the literature that the fundamental context in which cities are currently acting is the heightened mobility of capital. When looking at the cities competition for attracting *human* capital, QoL plays a key role. Place-based competitiveness, therefore, is considered to consist of the capability of a particular place to attract and maintain firms and workers, with a special emphasis on talented and highly endowed human capital workers, as they are the individuals with higher potentials for promoting innovation and subsequent economic growth and well-being.

The urban economic literature deals extensively with QoL as a crucial element of urban competitiveness and growth. We find a list of studies that focus on urban growth through the examination of location decisions of households and firms, both at an intercity and at an intracity level. The main purpose of these studies on urban growth is to find out what determines the capacity of cities to attract people and economic activity. The significant urban sprawl experienced by most big US and European cities at the end of the twentieth century and the observed decentralization of jobs and population triggered academic debates on the causes behind urban decline and most importantly the future of metropolitan areas. At the same time, due to the increased international mobility as a result of the globalization process, cities in developed countries started competing in order to attract people and investment. In this context, this strand of urban economic literature highlights the importance of location-specific attributes in generating urban growth. Location-specific attributes mean the local environment (climate and physical), public goods and services, local government policies (taxation and fiscal incentives), and social interactions. Therefore, the type, quality, and level of these location-specific attributes determine the attractiveness of a city as a place to live and work. These attributes are increasingly recognized as being as important as the pure economic factors (GDP per capita, cost of living, employment, etc.) in determining urban attractiveness and growth. Firms' location decisions are based only on cost minimization, while workers' location decisions are only driven by wage and rent considerations.

Depending on the purpose of each study and whether the analysis focuses on urban sustainable growth (the advantages of agglomeration vs. dispersion/sprawl) or interurban competition, the relevance of each location-specific attribute varies. In his discussion on the advantages of cities as urban agglomerations, Glaeser (2000) highlights the role of what he calls "nonmarket forces" in achieving urban growth. By nonmarket forces, Glaeser means idea flows between firms, human capital transfers between workers, peer effects, social capital, the formation of values, and the role of architecture. In a subsequent study, Glaeser et al. (2001) discuss the advantages that cities as spatial agglomerations have to offer, and they link them with the importance of the role of urban amenities as a crucial factor that can determine urban viability and growth.

The underlying idea is that big agglomerations that offer these types of advantages are viable, whereas others could potentially face a serious decline. These advantages constitute what the authors call the "urban amenity," which can be viewed as a desirable package of goods demanded by the "consumers" of urban space.

In the context of interurban competition among US cities, Graves (1976) was one of the first to find the correlation between environmental characteristics (more specifically weather) and urban population growth. In the European context, however, Cheshire and Magrini (2006) found for EU12 that urban population growth is driven by economic conditions rather than climatic differences. Nevertheless, their findings suggest that environmental attributes can explain mobility within countries (and consequently population growth of regions or cities).

Some work has been done trying to explain the internal mechanism that explains the role of quality of life in economic growth and consequent urban growth. In the study of urban growth, it is also important to include the work of Florida. Florida (2002) discusses the importance of high-quality goods and services – referring to them as "quality of place" – in attracting highly skilled labor to the high-tech sector in US cities. Following the growth models of Lucas and Romer, Florida's underlying assumption is the importance of knowledge and human capital in generating economic growth. In this context, he underlines the importance of a bundle of amenities, lifestyle options, and type of people as driving forces of the location decisions of the highly skilled labor force. In a similar context, Shapiro (2006) uses a neoclassical model of city growth, to find out that 40 % of employment growth for college graduates in US metropolitan areas is explained by the improvement of QoL (as opposed to 60 % as a result of productivity growth). Besides, Moretti (2003) points out the importance of social return of high agglomeration of human capital: the argument is that increasing human capital in cities should have an exponential effect on overall productivity due to the interactions among workers (the so-called *productivity spillovers*); moreover, it should also reduce criminal actions, having an indirect effect on QoL. Mellander, Florida, and Stolarick (2011) and Florida, Mellander, and Stolarick (2011) report that place-based factors, in particular the beauty and physical appeal of the current location and the ability to meet people and make friends, explain more of the desire to stay than do community economic conditions or individual demographic characteristics.

The relevance attributed to every factor can change as one works with a vision that gives priority to the competition between cities or with a vision centered on the urban sustainable growth (that supports agglomeration opposite to dispersion), this is, an intra-urban point of view. If we focus on the latter and we look at the significant phenomenon of the urban "sprawl" registered in most of the big western world cities, we can see how it has been accompanied by a debate about the reasons of this expansion, about the decline of the traditional high-density city, and also about the future of cities (see Glaeser (1998), Glaeser and Kahn (2004) for USA and Chesire and Hay (1989) for Europe).

Nevertheless, in the last few years, the reverse process has been observed, suggesting the possibility of an urban resurgence (see the special issue on urban resurgence published in 2006 by the journal *Urban Studies*). Resurgence involves an increase in a city's competitiveness and the revival of urban economies; it can be either intra-urban or interurban and does not necessarily involve population growth. Understanding the causes of local population change is of interest to academics and above all, due to its profound implications for social well-being, to policy makers. Faggian and Royuela (2010) and Royuela (2011) analyze the role of QoL in intra-urban terms. They find that increasing quality of life is important for gaining population, though an important nuance arises: the amount of services *accessible* may be more important than the number of services that corresponds strictly to every single municipality. The immediate consequence is that municipality competition within a metropolitan area in terms of QoL has serious drawbacks, residents in one municipality can

benefit from a good quality of life of a neighboring area without paying for it. It calls for particularly good institutional management in the provision of services related to QoL and well-being.

Finally, other papers stress that the final aim of city competitiveness should be to increase the well-being of population residing in these places (Easterlin, 1974). As productivity increases can be achieved at the cost of lowering well-being of some individuals, e.g., lowering salaries, it is not granted that final well-being is improved by increasing individually targeted QoL, for instance, for attracting talent. Huggings and Thompson (2012) analyse for UK cities the relationship between city competitiveness and well-being and they find that higher levels of place-based competitiveness are associated with generally higher levels of well-being. Consequently, when seeking to maximize the well-being and welfare of a place's population, competitiveness measures are a reasonable guide to the extent of success. However, there are externalities that may reduce the well-being of a locality's population, typified by the strong negative associations found between well-being and pollution.

Overall, the reviewed works emphasize the relationship between QoL and city attractiveness for talented people and consequently with city competitiveness. Nevertheless, some caution has to be considered, as it is not granted, at least in the short term, that improving the QoL for selected workers will improve well-being for the overall population.

Cross-References

- ▶ Environmental Amenities and Disamenities
- ▶ Facilities
- ▶ Public Good(s)

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City Culture Maps

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Synonyms

Cultural capital; Cultural indicators; Cultural resources; Cultural vitality

Definition

Cultural mapping entails analyzing a community's or region's assets, amenities, and characteristics related to arts and cultural dimensions. Maps vary by the need and desire of the area to chronicle or display their cultural assets.

According to Creativecity.ca, "cultural mapping is a valuable tool for identifying a community's strengths and its resources. This process can help as communities move into the planning and implementation phase by identifying early the resources, efficiencies and links between arts and cultural groups, as well as their common aspirations and values" – Honorable Stan Hagen, Minister of Tourism, Sports and the Arts (Creativecity.ca 2012).

Description

There is not one type of culture map; it really does vary depending on the area's needs and desires to explore and chronicle their cultural resources and assets. For example, Toronto, Canada, has a long history of research related to cultural mapping, resulting in a variety of resources regarding natural and cultural heritage, cultural enterprises, cultural occupations, cultural facilities, and public realm culture (City of Toronto, 2012). The city has developed a cultural plan, as well as supporting cultural maps to show distribution of cultural resources as well as other amenities.

Here is an example of just one city culture map, from the city's efforts to create an audio storytelling project. Named murmur, it allowed archives to be developed of the area's location-specific stories, using first person narrative. An interesting part of the project is that the stories were delivered by participants via mobile phones – a type of instant capture approach to record cultural aspects live.

According to those who conduct cultural mapping exercises, it can be an empowering process or can be experienced as a disempowering experience for some (Cultural Mapping, 2012) if they are not respected and included.

Cross-References

- ▶ Cultural Capital
- ▶ Cultural Goods and Services (Consumption of)
- ▶ Cultural Indicators

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City Development

▶ South African Urban Growth (1911–2000)

City Environment

▶ Built Environment

City Environmental Indicators

▶ Urban Environmental Indicators

City Growth in South Africa

▶ South African Urban Growth (1911–2000)

City Planning

▶ Land-Use Planning
▶ Planning, an Overview
▶ Planning, Spatial

City Planning (USA)

▶ Community Planning

City Quality

▶ Urban Life, Quality of

City Rankings

▶ Intra-urban and Interurban Quality of Life Approaches

City Regions in South Africa

▶ South African Urban Growth (1911–2000)

CIVED99

▶ International Association for the Evaluation of Educational Achievement (IEA): Civic Education Study of 1999

Civic Engagement

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Definition

Civic engagement has been defined as "behaviours that influence public matters" (Levine, 2007, p. 7). It is a catch all title for various indicators of democratic engagement. The emphasis of the word "civic" suggests community activities such as volunteering and community support. However, more recently the term has been associated also with indicators on political participation and political voice (Levine, 2007).

Description

The term civic engagement derives predominantly from the liberal model of citizenship. The liberal model emphasizes the right of individuals to participate politically or not as the case may be. It posits that, if the state is kept to a minimum, civil society will flourish. Civic engagement is thus the essence of civil society and is predominantly associated with indicators of volunteering and membership of nongovernmental organizations. Recent liberal thinkers have emphasized the importance of how humans interrelate with

each other in groups built on the foundations of trust. Hence, the liberal model has in recent years been influenced by Putnam's (2000) theories of social capital. Within the UK, for example, the recent debates regarding the "Big Society" can be understood as an outcome of this perspective. From the perspective of those who promote the "Big Society," citizens participate in associations, not only out of a feeling of obligation but a feeling of pleasure from enjoying forming relationships and building a sense of emotional attachment or belonging to a group (Norman, 2010).

The term civic engagement can also be considered to draw from the civic republican model of citizenship. This approach places higher demands on the citizen in terms of the maintenance of the democratic processes and institutions that in turn assure greater freedoms (Lovett & Pettit, 2009). From this perspective, citizens become the actors of positive laws for social change and the instruments to prevent corruption (Lovett & Pettit). Based on Greek and Roman philosophical thought, civic republicanism has emphasized the need for citizens to act politically within the public sphere and to be actively engaged within a political community as equal and free citizens. Thus, the notion of civic responsibility developed from this view. Compared to the liberal tradition, this approach places more of an obligation and value in political engagement and involvement in political decision making.

The civic republican approach also highlights the need for citizens to learn civic competences, including the values of public spiritedness, solidarity, and the responsibility to act for the common good (Honohan, 2002, p. 147), often referred to as "civic virtues." Honohan (2002) emphasizes that, without civic virtues, too much self-interest can lead to corruption. Putnam's (1993) early work on defining the competences necessary for the civic community in Italy also borrows from civic republicanism traditions. Putnam cites Banfield's example of a poverty-stricken village called Montegrano in which he attributes their economic situation to the fact that the villagers were unable to work together for a common purpose and were unable to transcend beyond their own family interests (Putnam, p. 91). Putnam therefore uses the example to highlight the need for citizens to work towards the common good.

Civic republicanism is typically associated with the French model of citizenship. The French Revolution is considered crucial in shifting "the meaning of citoyen from passive membership in the kingdom (subjecthood) to active participation as member of the newly sovereign people" (Preuss et al., 2003, p. 8). In addition, equality in political participation is considered a fundamental aspect of the French Republic, and there is much less focus on the community than the liberal model (Preuss, p. 8).

Civic engagement, although not exclusively, is used more frequently with an emphasis on the liberal models of citizenship in particular within Anglo-Saxon countries, while terms such as active citizenship that have slightly greater emphasis on the civic republican model of citizenship are used more in European institutions and European countries like Italy, France, and the Netherlands.

In the context of this encyclopedia, it is interesting to examine the relationship between civic engagement and quality of life. If we should take the liberal concept of civic engagement in terms of community action and use the indicator of membership of community organizations, then Helliwell and Putnam (2004) have found a positive and significant relationship with well-being measured by self-reported health status and happiness.

Cross-References

- ▶ Active Citizenship
- ▶ Democracy
- ▶ Democracy, Faith in
- ▶ Social Change

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Civic Engagement and Residential Satisfaction

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Definition

Social capital refers to anything that facilitates individual or collective action. Civic engagement is an observable result of social capital, which is defined as the sum of individual and collective actions designed to identify and address issues of public concern. More broadly, civic engagement can refer to a set of actions and efforts, a feeling of belonging, and an experience of investment and ownership in local, regional, national, or international communities. Residential satisfaction is defined as an individual's level of contentment with their environment and the degree to which they feel connected to their community.

Description

Research on the causes of civic engagement has highlighted how a number of factors across the various levels of analysis can influence participation. Scholars concentrating on the individual or micro level of analysis have identified two sets of variables that can influence whether people become civically engaged: psychosocial and socioeconomic. Scholars emphasizing psychosocial factors contend that one's level of civic engagement is dependent on factors such as social ▶ trust, ethnocentrism, group dynamics within communities, and the presence of cultural elites who can promote participation (Brehm & Rahn, 1997; Green & Brock, 1998; Green et al., 2002; Stolle, 1998) Conversely, scholars focusing on socioeconomic forces contend that civic engagement is dependent upon one's level of ▶ wealth, ▶ education, and ▶ social mobility (Costa & Kahn, 2004; Whiteley, 2000).

Scholars focusing on domestic-level factors have found that state-level attributes heavily influence civic engagement. For example, research has found that corporate/statist societies have less ▶ civic engagement than noncorporate societies (Curtis, Baer et al., 2001; Schofer & Fourcade-Gourinchas, 2001). Similarly, research has found that societies with a history of democratic values or Christian backgrounds tend to be more civically engaged (Curtis, Baer et al., 2001; Curtis, Grabb et al., 1992).

Research examining the structural or macro level of analysis has placed its attention on how broad social and material changes influence civic engagement. The dominant trend within this line of research emphasizes how structural forces such as advances in communication technology, corporate delocalization, and changes in class structures have deteriorated social capital within societies, thus leading to a decrease in civic engagement (Brehm & Rahn, 1997, Putnam, 1995, Skocpol & Fiorina, 1999).

While research has indirectly alluded to the connection between civic engagement and residential satisfaction (referring to an individual's contentment with their environment and their level of connectedness to their communities), a study directly examining the connection between the two was conducted by Grillo, Teixiera, and Wilson (2010). Grillo, Teixiera, and Wilson base their study on the assumption that individuals are primarily influenced by their immediate physical and social surroundings

(Shotter, 1997) and build upon the work of Brehm and Rahn, who suggest that civic engagement is a product of individuals' overall ▶ life satisfaction (Brehm & Rahn, 1997). However, unlike Brehm and Rahn who treat life satisfaction as a secondary variable, Grillo, Teixiera, and Wilson contend that life satisfaction is closely correlated to community-level factors such as basic service offerings (e.g., having good schools, public ▶ transportation, and health-care services) and lifestyle amenities (e.g., ▶ cultural diversity, vibrant nightlife, and outdoor settings for families to have fun). Building upon research findings in residential satisfaction, Grillo, Teixiera, and Wilson contend that people who are more content with their communities are more likely to become civically engaged (Grillo et al., 2010).

Grillo, Teixiera, and Wilson hypothesize that individuals living in communities with better jobs, educational opportunities, health care, and other basic service offerings, as well as lifestyle amenities, will be more civically engaged because they will have a stronger sense of attachment to and investment in the community (Grillo et al., 2010). This theory is in line with other residential satisfaction research, which suggests that individuals who like the places they live are more likely to have an increased sense of self-esteem and well-being (Cummins & Nistico, 2002). Moreover, their theoretical basis is also supported by more general findings in psychology that suggest that having a high sense of self-esteem will increase the likelihood of cooperation and engagement with others (Lerner, 2004, Mecca, Smelser et al., 1989). Based on their theory, Grillo, Teixiera, and Wilson develop the following hypotheses:

H_1 The more social offerings a community has, the higher its level of civic engagement

H_2 The more basic service offerings a community has, the higher its level of civic engagement

H_3 The more educational offerings a community has, the higher its level of civic engagement

Grillo, Teixiera, and Wilson tested their theory with data from Gallup's 2005 Glocal Panel Survey, which pulled a random sample of 3,213 residents from 21 major US cities. The data also included a sample of 821 residents from Washington D.C., Baltimore, and Omaha, which were over-sampled for regional comparison purposes. These selected cities were chosen to reflect a range of large- and medium-sized cities across the USA and are not meant to represent the entire set of US cities. The data was collected by Gallup between May and June 2005 and was weighted to reflect Census Bureau estimates for each city sampled (total weighted $N = 2{,}962$). Similar to other studies focusing on cities, suburban residents were removed from the sample bringing the N to 2,307 (both weighted and unweighted).

The dependent variable was "civic engagement," which is a composite measure that combines five questionnaire items determining the extent to which respondents contact their politicians, participate in petitions, make charitable donations, volunteer their time, and vote in local and federal elections. Each variable was measured on a three-point scale with the options (1) have done, (2) might do, and (3) would never do.

The first independent variable was "social offerings," which is a composite measure combining responses to questions such as whether respondents thought their community was a good place to meet people and whether it has places to facilitate such interactions. Additionally, the measure also contains respondents' evaluation of a number of factors related to the aesthetics of the community, its cultural offerings, and its nightlife. Each set of questions was evaluated on a five-point scale with one indicating "very bad" and five indicating "very good."

The second independent variable was "▶ basic needs." Respondents were asked to rate the extent to which they believed that their community has such features as ▶ affordable housing, good public transportation, quality health care, low traffic levels, and the availability of religious institutions. Each set of questions was evaluated on a five-point scale with one indicating "very bad" and five indicating "very good." The measure of basic offerings was the average of the eight items. The basic offerings measure resulted in two factors, one covering individual socioeconomic service offerings (e.g., education, jobs, health care, and public transportation) and the other covering structural offerings (e.g., low traffic levels, housing costs).

The third independent variable, "educational offerings," gauged respondents' opinion of the quality of their community's public high schools and universities. The variable was measured on a five-point scale with one indicating "very bad" and five indicating "very good." These two items were combined into a single composite measure. Finally, demographic variables were included to act as statistical controls. The authors included age and dummy variables for sex, racial-ethnic minority status, high school education or higher, college education or higher, making $75,000 or more a year, and making $30,000 or less a year.

The statistical analysis utilized hierarchical regression modeling. The first step model was comprised of the aforementioned control variables, which were drawn from the existing literature. The second step model included the hypothesized independent variables of social offerings, basic needs, and educational offerings. In the first step, all of the control variables were significant at the .05 level with a significant F value and an adjusted R^2 of .186. The authors found that increased age and having a college degree were positively associated with increased civic engagement, whereas being male, a minority, an individual with a lower income, and an individual without a high school degree was associated with a decrease in civic engagement.

In the second step model, all of the test variables were significant at the .05 level. Hypothesis 1 bore out as predicted, where the presence of more social offerings was associated with higher levels of civic engagement. However, the results for hypotheses 2 and 3, which dealt with basic service and educational offerings, had countered the posited relationships. The results suggested that increases in satisfaction with educational and basic needs were associated with a decrease in civic engagement. The inclusion of the three test variables of educational offerings, social offerings, and basic needs served to increase the percent of variance explained in the dependent variable. The step one model produced an adjusted R^2 of .186. Adding the three test variables increased the adjusted R^2 to .217, for an R^2 change of .032, which suggests moderate model strength.

While Grillo, Teixeira, and Wilson's study produced mixed results, their findings do have important implications for research on civic engagement. When controlling for other variables, it does not appear that individuals respond to perceived deficiencies in educational and community offerings. These findings contradict the conventional wisdom holding that civic engagement increases when people are dissatisfied with their communities. Grillo, Teixeira, and Wilson's results suggest that satisfaction with social offerings is associated with increases in civic engagement.

The research findings have implications for both academics and local-level political and civic leaders. In regards to academic research, the findings raise a new empirical puzzle: why are increases in social offerings associated with increases in civic engagement, while educational and basic service offerings are not? In regards to local-level politicians and civic leaders, the findings raise a number of interesting questions. Can local communities foster civic engagement by increasing social offerings? What kind of social offerings could be developed to target populations who, according to Grillo, Teixeira, and Wilson, are less likely to engage with the political process (e.g., young low-income males and minorities with lower education levels)? Where does the responsibility lie for creating new social offerings: the private or the public sector?

Given the economic difficulties that most state and local governments are experiencing, it is unlikely that the public sector will be willing or able to provide for such amenities. However, individual citizens, community groups, and local businesses can do much to promote social offerings. For example, individuals can start local clubs based on common interests and hobbies, community organizations can sponsor various social events that allow people to meet and network, and local businesses like restaurants, bars, and coffee shops can work with community-level groups to sponsor events, which can help people connect while supporting local businesses.

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Civic Organizations in Indonesia

► Civil Society Capacity Building in Indonesia

Civic Participation

► Association Memberships

Civil Disobedience

► Social Activism

Civil Society

► Association Memberships
► Community Participation

Civil Society Capacity Building in Indonesia

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Synonyms

Civic organizations in Indonesia; Non-governmental organizations (NGOs) in Indonesia; Nonprofit sector in Indonesia; Voluntary sector in Indonesia

Definition

Since the "third wave of democratization" in Latin America and Eastern Europe in the 1980s

(Huntington, 1991), the concept of civil society has entered into the general social science vocabulary. The modern use of the term comes from Hegel, who used the term "bürgerliche Gesellschaft" as the sphere between family and state that allowed citizens to pursue their individual interests. Today, civil society is most often used to describe the nongovernment, nonprofit, and independent nature of social organizations, autonomous from the state and bound by legal order or a set of shared ▶ values (Diamond, 1999, page 221). Civil society can actively engage in policy analysis and advocacy, monitor state performance, and build social capital and enable citizens to identify and articulate their values and civic ▶ norms. As such, civil society is not simply a collection of associations and networks; the Gramscian tradition depicts it as a public arena for deliberation, argument, and dissent, allowing citizens to exercise their democratic authority over matters of public concern (Edwards, 2000). Civil society is increasingly a driving force behind transitions from authoritarian rule, most recently depicted on the streets during the Arab Spring. The extent to which civil society spaces thrive is crucial to the health and depth of ▶ democracy and the quality of citizen life. Civil society capacity building is the efforts by governments, domestic institutions (other non-governmental organizations), and outside actors such as donors to increase the assets, capacity, and attributes that civil society can draw upon to build a civic culture of inclusion, ▶ pluralism, and accountability. Support is generally provided both to individual civil society organizations and for the enabling environment, such as policies and regulations.

Description

Civil Society in Indonesia

Indonesia is the fourth largest country in the world with a population of 248 million, since 1998 a vibrant democracy and the home to the world's largest Muslim population (CIA, 2012). Current national priorities issues include alleviating ▶ poverty, improving ▶ health and ▶ education, preventing terrorism, consolidating democracy and reforming the bureaucracy after decades of authoritarianism, stemming ▶ corruption, and addressing climate change. The country is ranked "free" by the Freedom House (2012) and other democracy indexes and has been declared a success story by democracy theorist Larry Diamond (2009).

Organized civic life has a long history in Indonesia and has played a crucial role to form Indonesia to a pluralistic, democratic, and peaceful modern nation of the twenty-first century. A rich texture of social groups and movements has traditionally existed in the country, such as religious societies, private schools, credit associations, mutual-assistance self-help groups, neighborhood organizations, and water-user associations. These were mainly ascriptive and not voluntary. It was with the rise of ▶ liberalism and modernity in the 1920s that social organizations in Indonesia developed into an emergent and self-sustaining public sphere. Popular mass-based organizations were established, based on religion, ethnicity, political affiliation, and other joint identities. Two of these Islamic organizations – Nahdlatul Ulama and Muhammadiyah – are still influential today, counting memberships in tens of million. NGOs began to emerge in Indonesia in the 1980s when the authoritarian Soeharto regime state opened up to NGOs to become partners in nonpolitical development activities and service delivery. However, many parts of civil society were under heavy repressions during the long authoritarian winter, with a lack of respect for civil liberties (Uhlin, 1997). Even though national development did occur, the price for the repression in terms of ▶ quality of life was too high, and middle-class opposition grew against the lack of civic freedoms and ▶ justice. A civil society coalition of students, NGOs, and middle-class professionals managed to force the authoritarian regime to step down in 1998, through opportunities provided by failing state functions, corruption, and an internal collapse of the regime.

Since then, the country has seen radical changes in the relationship between government and citizens (Antlöv, Brinkerhoff, & Rapp,

2010). Free and fair elections have been held in 1999, 2004, and 2009, and civil society has prospered. Freedoms of speech and assembly are respected, creating a vibrant public sphere. As a result of direct mayoral elections, impressive local reformers have been elected and brought real changes to their communities (Eckardt, 2008). This has gone hand in hand with the introduction in 2001 of wide-sweeping decentralization reforms, shifting resources, and decision-making power to local levels of government (Antlöv & Hidayat, 2004; Holtzappel & Ramstedt, 2009). Together, these processes have given rise to a vibrant civil society at the local level, where myriads of NGOs, social movements, and other forms of civic associations are engaging themselves in a range of issues around local governance, environment, ▶ human rights, and fighting poverty and corruption (Antlöv, Ibrahim, & Tuijl, 2007; Hadiwinata, 2003). However, civil society groups have in many cases not been able to fully participate in political processes, hampered by decades of restrictions and depoliticization. The government does not generally seek the input of civil society in policy-making (Beittinger-Lee, 2009).

Nevertheless, civil society is contributing strongly to the emergence of Indonesia as a plural and civic society. CIVICUS research (Heinrich, 2007, pages 202–203) has shown that more than half of all Indonesians belong to a civil society organization, with the highest membership in community and local group such as neighborhood associations (17 %), women's self-assistance groups (17 %), religious groups (16 %), and cooperatives (15 %) rather than in modern organizations such as NGOs (2.5 %), trade unions (2 %), and professional associations (3 %). This is not surprising, given the primacy of the community, as noticed in the article on ▶ community capacity building.

There are also civil society organizations that are a threat to freedoms and democracy, often called "uncivil society" (Annan, 2004; Kopecky & Mudde, 2003). Such groups are marked by a civic deficit, not recognizing universal values of human rights and using uncivil methods to reach their ambiguous agendas. A rise during the 2000s of radical Islam and vigilante groups disguised as civic associations – offering shortcuts and quick fixes to the perceived failings of modern society – are a threat to mainstream democratic values. They are being opposed through raising civic awareness and civil society capacity building.

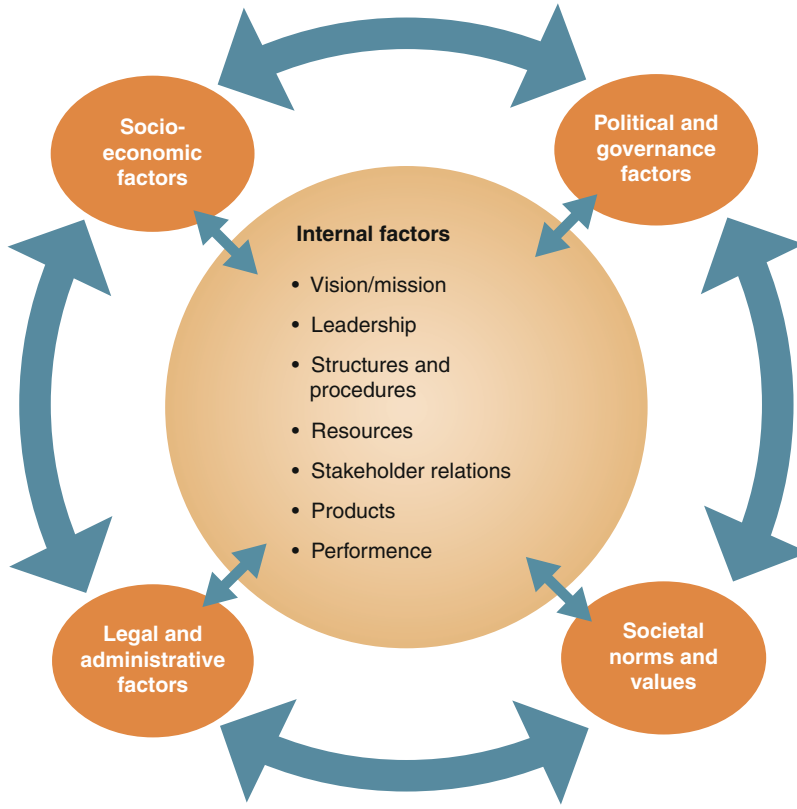
Building Civil Society Capacity

Since civil society is a crucial building block of a democracy and vibrant society, the skills, ▶ attitudes, and knowledge of the organizations that make up civil society become crucial for the health of a nation. Significant efforts have in Indonesia gone into support civil society, primarily by the international community, including bilateral donors and international NGOs. Beginning with the global emergence of "civil society" in the 1990s, a shift away from support for state institution and public administration led to increasing support for non-state actors in governance issues. Several donors launched large "civil society support programs" that support various civil society capacity, while international NGOs supported the emergence of advocacy and human right NGOs. After democratization in 1998, the process has continued unabated, although with a democratic shift towards engagement with government rather than adversary.

Civil society capacity is related to both internal and external factors. External factors include those related to politics and governance, societal norms and values, the legal and administrative framework, and socioeconomic conditions, and internal factors include vision and mission, leadership, management structures and procedures, resources, stakeholder relations, and products and performance (see Fig. 1).

In Indonesia, capacities that have been built include the following:

1. Building the basic tools and capabilities needed for citizens to organize themselves. The aim is to build inclusive and sustainable associations that can effectively engage in governance processes on a number of levels, including the technical skills necessary for organized and progressive citizens to exercise



Civil Society Capacity Building in Indonesia, Fig. 1 External and internal factors influencing NGO capacity. (Source: Antlöv et al., 2010, page 422, adapted from Brinkerhoff, Goldsmith, Ingle, & Walker, 1990 and De Vita, Fleming, & Twombly, 2001)

civic oversight over public policy to ensure that the government is complying with adopted policies.

2. Provide civil society with the voice necessary for them to engage in the process of formulating public policy. This means supporting inclusive and progressive elements of civil society that can articulate and promote the ▶ public interest to decision-making in ways that are acknowledged and respected.
3. Emboldening citizens with the skills, embody the values, and manifest the behavior that accords with democracy. Such awareness-raising programs provide the necessary tools to deepen citizen's understanding of government and allow them to better and fuller engage the government by introducing citizens to the key aspects of democratic political processes.
4. Internal civil society governance and capacities are crucial for the impact of civil society organizations. Capacity building has been provided to strengthen the governance of civil society organizations, including issues of accountability, diversity, gender, and management.
5. Support for the enabling environment, ensuring that civil society organizations can mobilize resources through fund-raising, are aware of the legal framework, and have a solid understanding of political stakeholder relations.

Civil Society and Quality of life

As noted in the article on ▶ civic engagement, there is a general positive correlation between civic action and human well-being. This is confirmed by the Indonesian case, which has found that the institutions of civil society have enabled Indonesians to share in charting the future of their societies. In one of the most common measures of development, the ▶ Human Development Index, Indonesia has made steady progress during the past decade, from 0.543 in 2000 to 0.617 in 2011.

Crucial triggers for this increase are the improved civic liberties and the incentives for elected political leaders to produce visible and broadly distributed improvements in the quality of life if they want to be reelected.

Cross-References

- ▶ Human Development Index
- ▶ Index of Arts as Community Builders

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Civil Society in Mexico and Chile

▶ Democracy and Development in Mexico and Chile

Civil Solidarity in Israel

▶ Israeli Democracy Index

Civil Unions in Canada

▶ Same-Sex Marriage in Canada

Clarificatory Questions

▶ Follow-Up Questions

CLAS

▶ Contentment with Life Assessment Scale

Class Consciousness

▶ Political Consciousness

Class ID

▶ Class Identification

Class Identification

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Synonyms

Class ID; Self-rated status; Subjective class; Subjective class ID

Definition

Class identification is the social class one *believes* one belongs to. As such, class identification is a subjective perception that does not necessarily coincide with objective notions of class position, such as occupational status, class schemes based on one's occupation, (household) income, job security, or educational level. In social research, class identification is often taken to be an indicator for consciousness of an objective class position or as an indicator for class identity, signaling a sense of cultural belonging to a class irrespective of one's actual class position.

Description

Class identification is a one-dimensional measurement of one's class position – i.e., a respondent is asked to indicate his or her own class position on a scale with four or five categories ranging from "lower" or "working class" to "upper middle" or "upper class."

A great share of social-scientific research is aimed at answering the question whether "subjective" class identification is better able to explain behavior, ▶ values, and ▶ well-being than "objective" measures of social class, such as occupational status, class schemes based on one's occupation, (household) income, ▶ job security, or educational level (e.g., Spreitzer & Snyder, 1974).

Another common research question is whether and how subjective and objective measures of social class are associated. There is indeed an association between subjective and objective indicators for class position (Hodge & Treiman, 1968). Yet, as society as a whole increasingly is becoming more complex (Kluegel et al., 1977), less collectively organized, more "open" in the sense that there are high rates of ▶ class mobility, and as the forces of production, which were once the main pillars of class allocation, are giving way to forces of ▶ consumption and lifestyle (Pakulski & Waters, 1996), it is very likely that subjective and objective class position are in fact diverging. People increasingly will have problems in identifying themselves with class positions that social scientists are used to associate them with. The question, then, is what subjective class identification still means in contemporary social research. Butler and Watt (2007) argue that, after the cultural turn in the social sciences, subjective class identification is no longer seen as an expression of consciousness or awareness

of an objective class position but as one of class identity in a cultural sense, which permeates one's social lifestyle and consumption.

Indeed, if class identity is to be considered as an indicator of class consciousness which may be increasingly incorrect, it may be expected that class ID is decreasingly related to ▶ values, behavior, or measures for ▶ quality of life such as subjective ▶ well-being. If subjective class identification is seen as an expression of a cultural identification with one's position in the status hierarchy, then it is to be expected to be a strong and powerful statistical corollary in social research. Indeed, as Calhoun (1982) argues, objective class positions can only have consequences for behavior if one subjectively believes that one is in such a class position. Consequently, if one is in a financially very secure position, one might feel very unhappy or dissatisfied with life because one actually sees him or herself as a member of the proletariat who is in an underprivileged position.

That this cultural perspective on subjective class identification is basically correct is shown by research about the relationship between class and measures for ▶ quality of life and ▶ well-being. Of course, there is an abundance of research showing correlations between traditional measures for "objective" class and ▶ well-being. A simple search on the World Database of Happiness (Veenhoven, 2011) reveals a multitude of correlational findings showing that those with higher levels of income, education, occupational prestige, and the like are associated with a higher level of well-being and happiness (Section 9.2.1 of the report shows on 73 findings about measures for objective class position and happiness. Section 9.2.2 reports 18 findings on happiness and subject class identification, see Veenhoven, 2011). Likewise, studies show that people considering themselves as middle-class or higher middle-class members are happier and score higher on subjective ▶ well-being (Lee, 1998; Taylor, 2008). Moreover, recent studies consistently show that compared to the association with "objective" indicators for class position, subjective class identification is correlated to subjective well-being more strongly (Adler, Epel, Castellazzo & Ickovics, 2000; Lundberg & Kristenson, 2008). Spreitzer and Snyder (1974) report similar results for people aged 64 or younger. For elderly (65+), however, they report stronger correlations between objective measures for class position and well-being than for subjective class identification.

There are two possible avenues for future research. The first is to study whether the ties between subjective class identification and subjective well-being are increasing or decreasing in time. Whereas some sociologists and political scientist argue that class, and with that the subjective identification with class, is dying (Pakulski & Waters, 1996), the logical hypothesis would be that in time subjective class identification will have a less strong association with measures for subjective well-being. Yet, following the cultural perspective outlined above, this may not be the case at all, and research into this matter might even result in increasing associations between subjective class identification and well-being.

Second, future research needs to settle the issue of causality. Even though there is much agreement on the question of the strength between the ties between subjective class identification and subjective well-being and happiness, there is an apparent disagreement about the endogeneity of subjective class identification. Whereas sociologists are traditionally inclined to see class position and the subjective identification with class position as an exogenous variable, able to explain just about everything including ones well-being (e.g. Butler & Watt, 2007), social-psychological researchers typically see subjective class identification as an endogenous variable which is mainly dependent on well-being (e.g., Lundberg & Kristenson, 2008).

Cross-References

▶ Class Mobility
▶ Consumption
▶ Household Income, Satisfaction with
▶ Job Security

- ▶ Lifestyle(s)
- ▶ Quality of Life
- ▶ Values
- ▶ Well-being

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Class Mobility

- ▶ Occupational Mobility

Classification Analysis

- ▶ Cluster Analysis

Classroom Climate

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Synonyms

Classroom context; Classroom environment

Definition

Classroom climate describes the social and psychological environment of a classroom as it is experienced by the students and staff who are learning and teaching there; it is closely related to the construct of school climate. Outside of this very broad description, educational researchers have not agreed upon a single, concise definition of school climate (Zullig, Koopman, Patton, & Ubbes, 2010), and the same is true for classroom climate. Most researchers consider it to be a multidimensional concept that incorporates organizational, instructional, and interpersonal characteristics (Loukas & Robinson, 2004). Particular emphasis and attention is given to those features of classroom environments that predict the academic, social, and behavioral success of a school's students. Almost every researcher describes the prevalence of positive or negative relationships among peers as a key component of classroom climate, while more recent definitions often emphasize the amount and threat of student violence and aggression on school grounds. Similarly, most definitions of classroom climate reference positive or negative relationships between students and their teachers, or among the teachers, administrators, and other adults in the building. Other aspects of classroom environments have been included in some but not all definitions: the physical characteristics of classrooms, the degree to which students adhere to school rules, the academic expectations held for students and those

that the students hold for themselves, and respect for diversity among students and school staff.

Description

Research examining classroom climate has occurred in waves, with the earliest studies occurring in the 1950s in response to organizational climate research being conducted within businesses and organizations (Zullig et al., 2010). By the 1960s, sociometric procedures were being used by educational researchers to describe the patterns of social interactions represented in student reports of the classmates that they did or did not want to work and play with (Barclay, 1992). Although hand coding of sociometric data was quite tedious, researchers were able to link sociometric measures gathered in late elementary school to high school graduation 6 or 7 years later (Barclay & Doll, 2001). Subsequently in the 1980s, sociometric strategies were widely used to identify rejected and isolated students within classroom social networks. The past 15 years have brought a renewed interest in the contributions of classroom climate to students' school success including their academic achievement, social success, and behavioral adjustment (National Research Council and the Institute of Medicine, 2004).

Nevertheless, discrepancies in the definitions of classroom climate have made it very difficult to build a comprehensive knowledge base describing the impact that social and psychological environments of classrooms have on students' school success. In their comprehensive review, Zullig et al. (2010) list 22 different sub-domains that have been included in researchers' operational definitions of school climate. They organized these into five larger domains: school safety climate, school academic climate, school social climate, school physical climate, and school belonging climate. When similarly specific terms frame discussions of classroom climate research, it becomes much more possible to identify common findings related to the origins and outcomes of classroom climate.

Classroom Social Climate. One pivotal domain of classroom social climate is the quality of the peer social interactions that occur in the classroom (e.g., Wang, 2009; Gregory et al., 2010). Three dimensions of peer relationships contribute to classroom social climate: the prevalence and strength of students' supportive friendships with classmates, their shared capacity to resolve conflicts with classmates in prosocial ways, and students' collective intolerance of bullying and victimization (Doll & Brehm, 2010). The opportunity to make friends and be friends is the aspect of schools that students value most highly (NRC/IOM, 2004). Peer conflicts are inevitable whenever large numbers of students work and learn together, and students' ability to manage and repair the conflicts defines a socially effective classroom climate (Doll & Brehm, 2010). Finally, students feel safe from overpowering or hurtful peer aggression when adults and classmates intervene to protect each other from bullying and victimization. Highly positive social relationships with peers strengthen students' enjoyment of school, their commitment to doing well, their success on academic tasks, and ultimately, their school completion (Doll & Brehm, 2010; NRC/IOM, 2004).

A second, equally important domain of classroom social climate is the relationships between teachers and students. Teachers' relationships with their students strengthen classrooms' social climate when they are warm, caring, and responsive to students' individual needs and convey a strong respect for students' success (Doll, Zucker, & Brehm, 2004). Such relationships make it possible for students to take risks in learning and master unfamiliar or difficult knowledge while reassured of their teachers' assistance and positive regard. Even more important, teachers' caring is a powerful determinant of students' sense of "belonging" and "connectedness" to the school, and their connectedness predicts students' motivation to do well and stay in school. Teacher–student relationships are even more important when students are struggling with social adversity and stressors such as poverty, family discord, or community violence (Hamre & Pianta, 2005; Ritchie & Howes, 2003).

Adult–adult relationships are also important for classrooms' social climate. Teachers emphasize the relationships that exist among teachers and between teachers and administrators, when describing their school's climate. Moreover, when the classroom social climate is positive, parents are more likely to be involved at school, and higher levels of parental involvement are associated with increased personal and academic success for students (NRC/IOM, 2004).

Classroom Disciplinary Climate. Also referred to as orderliness or rule-following, classrooms' disciplinary climate describes the degree to which class behavioral norms are perceived to be reasonable, fair, and effectively enforced. This requires that teachers strike a fine balance between consistently enforcing school rules and supporting students' developmental needs for autonomy and self-regulation (Gregory et al., 2010). To the degree that students actually participate in forming class rules, strong classroom disciplinary climates promote students' personal responsibility for their learning and behavior (Gregory et al.; Wang, 2009). Stronger classroom disciplinary climates minimize the behavioral disruptions that can interrupt teaching and learning, and classwide commitment to behavioral norms creates a shared expectation for courtesy and respect between and among students and teachers. Both classroom-level and schoolwide disciplinary climates have been related to better student behavior, greater student understanding of school rules, less bullying and victimization, and more active student participation in learning (Gregory et al., 2010; Koth, Bradshaw, & Leaf, 2008; NRC/IOM, 2004).

Classroom Safety Climate. The safety climate of classrooms references students' and teachers' expectations that they will be safe from harm while teaching and learning in the class. Depending on the researcher, investigations examine the frequency of crimes, peer bullying, or peer aggression or some combination of these in the school. Most researchers posit a cyclical mechanism in which student perceptions that bullying and aggression are pervasive and tolerated within their classroom lead to a culture of bullying which, in turn, prompts even higher rates of violence and aggression (Gregory et al., 2010; Meyer-Adams, & Conner, 2008). Classroom safety climate is closely related to classroom social climate given that bullying and violence are instances of malevolent interpersonal aggression, and is closely related to classroom disciplinary climate because schools' most prominent rules are those that prohibit aggression and conflict. Indeed, Gregory et al. (2010) hypothesized that the optimal condition for the emergence of a superior school safety climate is a strong school social climate combined with an effective school disciplinary climate.

Classroom Physical Climate. Relations between classrooms' physical environments and subsequent student success have been attributed to two possible mechanisms: First, aspects of the classroom that are disturbing or distracting may interrupt student learning and detract from their general sense of well-being. Second, classrooms that are orderly, clean, and pleasant in appearance convey a sense of respect and valuing to the students who learn there. Illustrating the latter mechanism, Haynes (1996) has argued that students are fond of attractive schools, behave better and are more motivated in pleasant school buildings, and are less likely to engage in violence or fighting. Maxwell (2006) has shown that cluttered, overcrowded classrooms limit student privacy and personal space, distract student concentration, and interrupt student learning.

Classroom Achievement Climate. Classrooms' achievement climate refers to those aspects of classrooms' extra-instructional practices that contribute to students' interest in and likely success at mastering the curricular objectives (NRC/IOM, 2004). Four key aspects are emphasized in contemporary examinations of achievement climate: students' beliefs that they will be academically successful (academic efficacy), the ambitiousness of their academic expectations together with adults' high standards for the students' achievement (academic expectations), the supports that exist to foster students' autonomy and self-regulation (academic self-determination), and the schools' emphasis on mastery goals over competitive goals to guide

students' learning. Even though traditional educational theories described these as individual characteristics of students, these also represent collective experiences of groups of students who populate a classroom (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003; NRC/IOM, 2004). Moreover, these four aspects of classrooms' climate are logically interrelated. Students' efficacy beliefs shape their achievement behaviors; if they expect to be successful, students act with persistence, effort, and strategic study behaviors that prompt their success (Schunk & Pajares, 2005). Their efficacy beliefs provide them with the optimism and encouragement that they need to tackle challenging learning tasks. Challenging standards for students' learning convey trust in the students' capacities, and when students play a role in setting these ambitious standards, their learning is more likely to be volitional, spontaneous, and interesting (Black & Deci, 2000). Vesting students with responsibility for making decisions about and taking steps to further their own learning is an essential first step in promoting students academic self-regulation. Ultimately, framing these goals and decisions around the mastery of tasks rather than competition with classmates gives emphasis to the knowledge and skills that students need to acquire to become self-sufficient, lifelong learners (Pajares & Schunk, 2001).

Classroom Diversity Climate. Cultural differences may influence how students perceive their classroom climate (Kuperminc, Leadbeater, Emmons, & Blass, 1997). For example, Slaughter-Defoe and Carlson (1996) found that African American students perceive the teacher–student relationship as the most important factor in evaluating climate, while Latino students view teacher fairness, caring, and praise as most important. Classrooms' diversity climates are complicated when cultural diversity is confounded with economic disadvantage. Students from communities that are oppressively impoverished can be overwhelmed with a shared sense of hopelessness that translates into discouragement and diminished opportunities for both students and teachers (Banks & McGee Banks, 2001). In response, classrooms with strong diversity climates build a community among students in culturally appropriate ways that recognizes and builds upon the strengths of multiple cultures that exist within the classroom and creates an environment where students feel safe and understood (Miranda, Boland, & Hemmeler, 2009).

Measures of Classroom Climate

By definition, classroom climate represents the shared perceptions of people who participate as members of the class, and so it is most often (but not exclusively) assessed through surveys. Survey measures of classroom climate differ in the respondent: Student surveys ask questions about aspects of the classroom climate that students are particularly knowledgeable about, such as peer interactions or academic expectations. Teacher/staff surveys sample adult perceptions of, for example, classrooms' instructional climate, adult interactions, or the safety climate. In some cases, parents or other community members might be asked to complete classroom climate surveys representing their experience. Using either student or adult surveys or both, the strength of a classroom's climate is described by how positive the respondents' perceptions are. For example, the Yale School Climate Survey (Haynes, Emmons, & Comer, 1993) assesses students' perceptions of achievement motivation, fairness, order and discipline, parent involvement, sharing of resources, student interpersonal relationships, and student–teacher relationships. The ClassMaps Survey assesses students' perceptions of teacher–student relationships, peer friendships, peer conflict, worries about peer aggression, home–school relationships, academic self-efficacy, self-determination, and behavioral self-control (Doll, Spies, LeClair, Kurien, & Foley, 2010).

Sociometric surveys represent a special case of student surveys; they ask student peers in a classroom to identify classmates whom they do and do not prefer to play or work with (Barclay, 1992). Sociometric results can be summarized to identify students with exceptionally favorable or unfavorable nominations. Alternatively, sociometric data can be used to

describe the social networks of a classroom, including the degree to which these are integrated or isolated into cliques, or to describe the frequency of positive and negative nominations within a group. The Barclay Classroom Assessment System (Barclay, 1983) is an example of a classroom climate measure that was predicated on sociometric strategies.

There are a few examples of observational measures of classroom climate. As one example, the Classroom Assessment Scoring System (CLASS; Pianta, La Paro, & Hamre, 2008) is an observation system that assesses emotional support, classroom organization, and instructional support in preschool through third grade classrooms.

Intervening to Change Classroom Climate

The strongest interventions to strengthen the climate of a classroom are generally systemic in design because they rely upon the shared effort and collaborative involvement of all participants – the teachers, other educators, students, and their families. Their impact depends upon the identification of a clear target or goal for change, reinforcing the need for precise operational definitions of classroom climate. As a first step, climate-building interventions work to modify the procedures and practices that frustrate students or teachers, and these early steps in an intervention may have immediate and important effects on student or adult satisfaction. For example, one unintended barrier to effective peer relationships on many elementary school playgrounds is crowded playgrounds with insufficient developmentally appropriate games for upper elementary students. In subsequent steps, the interventions generally require substantive and carefully isolated changes in the habitual practices of students and adults. Changing habitual ways of managing a classroom requires considerable time, ongoing and careful communication from all stakeholders in the building, and innovative creativity for envisioning new and alternative ways of being. Above all, effective interventions to promote strong classroom climate require a careful balance and equitable valuing of all members of the classroom community.

Cross-References

- ▶ School Climate
- ▶ Social Networks

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Classroom Context

▶ Classroom Climate

Classroom Environment

▶ Classroom Climate

Cleveland Clinic IBD Scale

▶ Health-Related Quality of Life and Inflammatory Bowel Disease

Climate Analysis Indicators Tool

▶ Indicators of Ecosystem Change

Climate Analysis Indicators Tool (CAIT)

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Synonyms

CAIT

Definition

The Climate Analysis Indicators Tool (CAIT) is an information and ▶ data analysis tool on global climate change developed by the World Resources Institute. CAIT provides a comprehensive and comparable database of greenhouse gas emissions data (including all major sources and sinks) and other climate-relevant indicators.

CAIT can be used to analyze a wide range of climate-related data questions and to help decision-making in a variety of fora (Climate Analysis Indicators Tool (CAIT) version 8.0 [CAIT], 2011). CAIT is free and available online at http://cait.wri.org.

Description

Drawing on the data of respected research centers, national agencies, and international organizations CAIT compiles (World Resources Institute [WRI], 2010a) and reports historical emissions of the six "Kyoto" greenhouse gases (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6) for major economic sectors (e.g., transportation, agriculture) in over 185 countries. CAIT's greenhouse gas data and related indicators (e.g., emissions per capita) are complemented by a number of other national data sets relevant to decision-making on climate change, such as energy use, population, and gross domestic product (GDP). Projections of energy-related CO_2 emissions are also available.

Data and indicators in CAIT are divided into three categories: GHG emissions, socioeconomic, and natural factor indicators. GHG emissions include (1) total annual emissions of greenhouse gases, (2) indicators that relate to the historical responsibility for climate change, and (3) intensity indicators, such as CO_2 emissions per GDP. Socioeconomic indicators include several indicators that relate to the capabilities that countries may have to protect the climate system, including ▶ health, ▶ education, income, ▶ governance, and other indicators. Finally, natural factor indicators represent those factors that tend to lie largely beyond the reach of public policy (like climatic conditions, fossil fuel reserves, and geography), but which nevertheless may significantly influence GHG emissions (CAIT, 2011). For more information, see (WRI, 2010b).

CAIT's web platform enables users to visualize the indicators through an interactive and customizable interface using maps, charts, and tables. In addition, CAIT includes a suite of analysis tools that help users assess indicator trends and make quantitative comparisons between sectors, countries, and regions. For example:

- *Calculate trends* enables users to calculate rates of growth (total and yearly) for any indicator and time period.
- *Compare countries* enables users to select any two countries or regions for easy comparison across all indicators.
- *Compare indicators* enables users to compare two indicators side-by-side and calculate the "rank difference" for each country.

However, CAIT is actually not a single tool, but a set of tools hosted on the same web platform, each with its own purpose. The CAIT (or CAIT-International) module described above is accompanied by three other modules that incorporate different data and indicators.

- *CAIT-UNFCCC* complements CAIT by providing a basic interface for viewing and analyzing official GHG emissions data. Whereas GHG emissions data in CAIT draw on "unofficial" data sources, all GHG data in CAIT-UNFCCC are drawn exclusively from official submissions by Parties to the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat (CAIT, 2011). These data, in raw form, are available to the public from the UNFCCC website (http://unfccc.int).
- *CAIT-US* is an interface for viewing GHG data and other climate indicators related to US states (CAIT, 2011). CAIT-US includes economy-wide emissions of the six major GHGs from most major sources and sinks for all 50 US states and the District of Columbia. CAIT-US GHG data are derived from the State Inventory Tool (SIT) of the US Environmental Protection Agency's (EPA's) Emissions Inventory Improvement Program (EIIP).
- *CAIT-V&A* is an interface for viewing data and indicators related to countries' vulnerability and adaptive capacity (V&A). CAIT-V&A provides a set of carefully selected national-level indicators designed to encourage discussion, enable quantitative insights, and inform

decision-making on measuring vulnerability to climate change and adaptive capacity. This suite of indicators includes both absolute and relative measures for assessing social, economic, and environmental drivers of vulnerability to the effects of a changing climate system (CAIT, 2011).

Uses of CAIT

Since its launch in 2003, the CAIT platform has attracted users from all over the world, distributed across academia, governments, international organizations, the private sector, research institutes, and the media. The uses of CAIT data and analysis are also extremely diverse, spanning a variety of political levels (local to international) and presentation formats (e.g., reports, news stories, graphics, online tools).

In addition to these and other applications of CAIT by its user base, CAIT data and analysis also underpin analytical reports by WRI (e.g., Baumert, Herzog, & Pershing, 2005; Herzog, Pershing, & Baumert, 2006; Larsen, Damassa, & Levinson, 2007) and are used to support the organization's own policy-related initiatives.

Cross-References

- ▶ Data Analysis
- ▶ Education
- ▶ Governance
- ▶ Gross Domestic Product (GDP) and Happiness
- ▶ Health

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Climate Change and Human Behavior

- ▶ Fostering Pro-environmental Behavior

Climate Change, Arctic

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Definition

Climate change refers to the variation in climatic parameters that are attributed directly or indirectly to the effects of human activity (Lange, 2005). Scientists thus distinguish climate change from climate variability, which refers to changes in climatic conditions that are considered to arise from natural mechanisms and processes. Climate change occurs in addition to or despite processes of natural climate variability, yet assessing whether the causes of a changing climate are due to anthropogenic impacts or natural variability is often difficult. While it is generally agreed by scientists that Earth's climate is changing and that no region of the world is unaffected by global climate change, climate change impacts on the Arctic have been particularly intense over the last two decades or so (ACIA, 2005; IPCC, 2007). Climate change and global warming are often

used interchangeably, especially by the media, but this can lead to some confusion. Yet there is a marked difference between the two. Global warming is the enhanced greenhouse effect and the trend in the increase of mean global surface temperatures, whereas climate change can result in a cooling as well as warming of the Earth's near-surface temperature.

Description

Climate change has become a critically important environmental, social, and political issue in the Arctic. The Arctic has a history of sensitivity and vulnerability to climate change and scientific scenarios suggest that, during this century, northern circumpolar regions will experience a greater degree of immediate change to ecosystems and human societies than elsewhere (ACIA, 2005; IPCC, 2007). Scientific research and the observations of indigenous and local peoples have increasingly documented climate changes that are more pronounced in the Arctic than in any other region of the world (Krupnik & Jolly, 2002). Recent regional and global assessments (e.g., most notably, the Arctic Climate Impact Assessment, the Intergovernmental Panel on Climate Change 4th Assessment, the Millennium Ecosystem Assessment, and the national Canadian assessment of climate change) show how the Arctic has emerged in recent decades as a region of dramatic and far-reaching environmental change.

Global climate change is being felt first and foremost in the Arctic, and the peoples who live there are already witnessing and experiencing the changes. Those feeling the impacts most tend to be people, such as indigenous groups, whose livelihoods and cultures are inextricably linked to the Arctic environment and its wildlife (Crate, 2008; Ford, Smit, & Wandel, 2006; Nuttall et al., 2005). The most direct changes affecting the Arctic are noticeable in the reduction of the extent of sea ice and permafrost, pronounced reductions in seasonal snow, and the disappearance of the existing glacier mass (ACIA, 2005; IPCC, 2007). In many parts of the Arctic, these changes are already beginning to disrupt the migration routes of caribou, seals, whales, fish, and geese. In turn, these changes are impacting upon the hunting, trapping, and fishing economies of many small, remote Arctic settlements. Although warming may increase biological production in some wildlife species, the distribution of many species crucial to the livelihoods and well-being of indigenous peoples is beginning to change. Important wetlands are showing signs that they may disappear, while drainage patterns and tundra landscapes are being altered significantly.

As the climate changes, the Arctic's indigenous peoples face special challenges, and their abilities to harvest wildlife and food resources are being severely tested at a time when many communities already experience food insecurity. For example, Ford and Beaumier (2011) identified multiple determinants of food insecurity operating over different spatial-temporal scales in the Nunavut community of Igloolik. These determinants include food affordability and budgeting, food knowledge and preferences, food quality and availability, environmental stress, declining hunting activity, and the cost of harvesting. All of these occur in the context of changing livelihoods and climate change, which in many cases, they argue, exacerbate food insecurity. A change in the ability of indigenous peoples to access food resources can have a corresponding impact on the social fabric of communities. In a very real sense, the discussion of how to respond to the impacts of climate change on hunting, herding, fishing, and gathering by indigenous peoples in the Arctic is about sustaining an appropriate human/food resource relationship in indigenous societies, as well as being aware that this impact poses a threat of severe and irreversible social changes (Nuttall et al., 2005).

The Earth's climate is inextricably linked to the Arctic climate system and climate research in the Arctic is essential for our understanding and increased knowledge of global changes. As global discussion turns increasingly to the critical issue of how societies are to adapt to climate change, both research and policy responses need to be robust in their applicability to and relevance

for Arctic communities, as well as for other regions of the world most vulnerable to climate change, such as the Himalaya, the Andes, and South Pacific islands. Understanding the human dimensions of current and future global climate change, and thinking about appropriate adaptive strategies, means understanding past climate change, and how human societies have responded to, coped with, and negotiated change (e.g., Henshaw, 2003).

How Arctic communities are to become resilient to climate change and how they should prepare to respond, cope with, adapt to, and negotiate climate change and its impacts, risks, and opportunities will require urgent and special attention. The question of resilience (both social and ecological) is of critical importance for policy discussion, as it is a crucial aspect of the sustainability of local livelihoods and resource utilization. There is still little known about how societies build adaptive capacity in the face of climate change. Moreover, researchers and decision-makers need to be particularly attentive to the reality that communities differ in the ways they perceive risk, in the ways they utilize strategies for mitigating negative change, and in the effectiveness of local adaptive capacity. Policy responses need to be informed by a greater understanding of how potential impacts of climate change are distributed across different regions and populations in the circumpolar north. Policy responses should also recognize climate change impacts within the broader context of rapid social and economic change and in their implementation should underscore the reality that climate change is but one of several problems affecting people and their livelihoods in the Arctic today (Nuttall et al., 2008).

Cross-References

- ▶ Community Adaptation, Arctic
- ▶ Globalization, Arctic
- ▶ Human Development, Arctic
- ▶ Migration, Arctic
- ▶ Subsistence in the Arctic

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Climate of Opinion

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Synonyms

Dominant Current of Opinion

Definition

Climate of opinion is the perceived majority of opinions of a given social group at a given time.

Description

The Uses Within History of Ideas

The concept originates in the history of ideas, seemingly coined by the seventeenth century author Joseph Glanville and rediscovered by Alfred Whitehead in his Lowell lectures (1925) (Geiger, 1955). Among historians, it was popularized by Carl Becker, (1932), being considered synonymous with "instinctively held preconceptions," "conventional world-views," "basic intellectual viewpoint," "spirit of an age" (Zeitgeist), "Weltanshaunung", "intellectual climate," "collective 'state of mind,'" "the prevailing psychological state," and "national mood." The main idea behind the concept is that there is a generality of opinions or at least of a certain way of seeing that is specific to a certain historical era. Skotheim (1969) highlights that even the historians are influenced by this climate of opinion when they record and interpret the historical facts.

As such, the concept reflects a modern relativistic paradigm, but it is in itself subject to critics, on the basis of its *oversimplification* (by not taking into consideration the contradictions within the same culture and era), *elitism* (the characteristics of works of some preeminent intellectuals are taken as common to a whole era), and *reification* (considering ideas independent of human agency). In the recent intellectual history, it is replaced by the term "discourse," also subject to many critiques (McDaniel, 2004).

As Ritter (1986, p. 459) observes, the notion "suggests a loose relationship to the origins of social psychology in the early twentieth century" – a reference to mass psychology of Gustave le Bon. Within the field of sociology of communication, the concept will lose its elitist and intellectualist characteristics.

Spiral of Silence

The climate of opinion will be borrowed and reshaped by the famous ▶ public opinion specialist Elisabeth Noelle-Neumann (b. 1916, d. 2010) to represent the majority of opinions of a given social group at a given time. It constitutes a central point of her theory of the "spiral of silence" (1974). Modern individuals, she claims, have a "quasi-statistical sense" (Noelle-Neumann, 1987). They actively scrutinize their "social environment" and make assumptions about the "majority" of opinions. In a static opinion context, driven by a fear of social isolation, they will express their opinions only if these are consonant with what they perceive to be the same with the majority. The estimation that her opinion is losing ground will trigger a more reserved attitude toward expressing this opinion, resulting even in the reluctance to express it. This downward spiral, leading to a suppression of minority views, is called the "spiral of silence."

Psychological Underpinnings

The effect of spiral of silence can be seen as opposite to ▶ positivity bias: People underestimate the social amplitude of their opinions and overestimate the amplitude of an opposite idea. Spiral of silence is also grounded on a theory of "fear of isolation" that keeps people alert to the social environment. Based on the Asch (1955) experiments of social conformity, "fear of isolation" drives people toward conformism even when people "saw with their own eyes that the majority view was not correct" (Asch, 1955).

A refinement of the theory suggests that this is driven more by positive attraction (Salmon & Kline, 1983). Anticipative socialization (people adopt behaviors and opinions of groups in which they want to integrate) may also explain such behaviors.

Role of Mass-media

Whatever the psychological mechanism involved, the role of the media within the theory is essential. Media not only affect public opinion but also report the popular opinion, re-presenting

the climate of opinion at a given moment. Indeed, when the topic is clear (such in the case of an election), people can have a more accurate perception of public opinion. Mass-media intervene more in other contexts when such perception cannot be possible, and thus affect the climate of opinion (Jeffres, 2008). They create a picture of opinions that are shared by most people and of opinions which are not popular. Thus, media are "ubiquitous" (we are always exposed to them) and "consonant" (because of the similarity of news and other information) (Salmon & Glynn, 1996).

Implications for Moral-social Life

While consensus is an indispensable condition for the good functioning of society, conformity may be dysfunctional because it eliminates the independent contribution of every individual. As Asch (1955, p. 5) puts it, unconditional conformity makes "the social process [..] polluted [. . .]. That we have found the tendency to conformity in our society so strong that reasonably intelligent and well-meaning young people are willing to call white black is a matter of concern."

Thus, the spiral of silence can limit the expression of different point of views and discourage open discussions that are conducive to organizational and societal improvement.

A solution would be the development of critical thinking. As Asch' experiments also showed, if subjects with different views are supported by at least one confederate, the rate of conformity dropped to a fourth of the level registered under conditions of unanimity.

Climate of Opinion as a Social Indicator

Noelle-Neumann defines climate of opinion indicators as a special type of social indicator as those who report "assumptions and observations made by the individual about his environment, in part directly and personally, and in part indirectly perceived through reporting in the media" (Noelle-Neumann, 1987).

As such, it can be categorized as an evaluative subjective social indicator (see ▶ Social Indicators)

Measuring the climate of opinion is done by asking people to evaluate a subject (attitudes, level of stress, life satisfaction, etc.) and to report their opinions on how others perceive the same issue (Noelle-Neumann, 1987). In most of cases, she found an obvious discrepancy between the report of own satisfaction and the perception of the satisfaction of others.

Climate of Opinion, Table 1 Perceived QOL for self and others (Source: Noelle-Neumann, 1987)

	Most people %	Own satisfaction with life %
Satisfied with life	47	79
Not so satisfied	40	21
Undecided	13	0.5

Example:

1. Do you have the impression that most people in the Federal Republic are satisfied with their lives generally speaking or they are not so satisfied?
2. Would you say that you are satisfied with your life generally speaking or are you not so satisfied (Table 1)?

Climate of Opinion, Better-Than-Average Effect, and Psychological Distance

These results are in concordance with what was named the better-than-average effect: People report they are more satisfied with their life as whole than the average person. While better-than-average effect was proposed within a psychological framework, and is explained by the need of ▶ self-enhancement or well-being ▶ homeostasis, the climate of opinion approach insists on the social influence effects of media that builds a picture of dissatisfaction or ill-being in the larger geographical areas: Mass-media build our perception that people in the country are rather stressed or dissatisfied with social conditions.

Noelle-Neumann (1987) found this kind of discrepancy to be true not only for the evaluation of personal conditions, but also of conditions in the immediate vicinity, compared with the condition in the country in general. Indeed, further works show that the perception of climate of opinion varies with ▶ psychological distance. For example, people from one's city or from

country are judged to be less satisfied with life than family, friends, or neighbors. This is explained in the framework of the influence of mass-media: Evaluation of how satisfied people are in the country can only be the results of news on TV, radio, and so on, while we make an idea on how closer people are satisfied by simply interacting with them. Moreover, an increased level of media use is associated with lower levels of evaluation of satisfaction of people in the country (Baltatescu, 2001).

Critiques and Limitations

The theory of spiral of silence was subject to various critiques (see, for example, Scheufele & Moy, 2000), most of them focusing on the mechanisms of conformity. Individual or social psychological traits are associated with variations in conformity effects. For example, a more positive self-concept discourages conformity. Collectivism is associated with a drive for conformity to the group. In other contexts, the conformity effect was not even confirmed (Jeffres, Neuendorf, & Atkin, 1999).

Cross-References

- ▶ Collectivism
- ▶ Communication and Personal Well-Being
- ▶ Cross-Cultural Comparison
- ▶ Homeostasis
- ▶ Mass Media and Quality of Life
- ▶ Media Literacy
- ▶ Moral Theories
- ▶ Positivity Bias
- ▶ Psychological Distance
- ▶ Public Opinion
- ▶ Self-enhancement
- ▶ Subjective Indicators

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Clinical Counseling

- ▶ Counseling

Clinical Dementia Rating Scale

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Synonyms

CDR

Definition

The CDR is a rating scale for the clinician to characterize the degree of severity of dementia (from 0 = "no dementia" to 3 = "severe dementia"); it is based upon semi-structured interviews with (a) the patient thought to suffer from dementia and (b) with a knowledgeable informant (usually spouse or child). The interview with the patient includes among others cognitive tasks, e.g., concerning memory and orientation. Specifications concerning administration time differ between 30 and 90 min.

Description

Hughes, Berg, Danziger, Coben, and Martin (1982) developed CDR initially as a device to stage senile dementia of the Alzheimer type (SDAT); Morris (1993) added some specifications to the rules that are mostly used nowadays (for details see also http://alzheimer.wustl.edu/cdr/aboutcdr.htm). Meanwhile, its application has however widely spread to other forms of dementia.

The construction of the instrument was based on clinical experience; it is emphasized that the information basis is less normative (comparison to peers) than based on individual changes, i.e., the actual status is to be compared to functioning in the preceding years.

The five-point ratings of impairment (from 0 = *non*, 0.5 = *questionable*, 1 = *mild*, 2 = *moderate* to 3 = *severe*) concern six domains of cognitive and functional levels (memory, orientation, judgment and problem solving, community affairs, home and hobbies, as well as personal care); ratings are facilitated by descriptive references of what may be typical at the corresponding stage. The domain-specific ratings are called "box scores." The global score is determined by applying clinical scoring rules that outweigh the Memory score; however, the "Sum of Boxes" (SB; = sum of the six box scores) is also discussed and used (e.g., Coley et al., 2011; O'Bryant et al., 2010). Which indicator is to be preferred depends on the context; e.g., Chang et al. (2011) showed that neglecting functional information (concerning instrumental daily activities of life) and using the global score only could retard the identification of certain MCI patients running a greater risk of decline.

Constructed as a paper-pencil instrument, a computerized version (Galvin, Meuser, Coats, Bakal, & Morris, 2009) is available by now as well. The development of this version made clear that clinicians are weighting information obtained, dependent upon the informant and the degree of impairment. In the development process, this observation was taken into account, and the authors succeeded in emulating the clinical judgment up to an agreement of 77–93 %.

There exist several adaptations for more specific use, e.g., Stages 4 (profound) and 5 (terminal) were added to classify all stages of dementia (Heyman et al., 1984); this version is called the extended CDR. A further modification for subjects living in nursing homes, the CDR-CC (chronic care), was introduced by Marin et al. (2001). Here, the questions were adapted to activities available in nursing homes.

A short ("modified") version, the mCDR (Duara et al., 2010), based on a structured interview with multiple choice answers applied to an informant only, is much briefer than the original scale; it was shown to be reliable and valid especially for early stages of dementia.

CDR has been translated into many languages: Chinese (e.g., Qi-hao, Zhen, & Huan, 2004), French (e.g., Coley et al., 2011), German (e.g., Luck et al., 2008), Hebrew (e.g., Dwolatzky,

Dimant, Simon, & Doniger, 2010), Italian (e.g., Borroni et al., 2010), Japanese (e.g., Inoue et al., 2012), Korean (e.g., Baek et al., 2011), Norwegian (e.g., Sommer & Engedal, 2011), Portuguese (e.g., Fagundes Chaves et al., 2007; Maia et al., 2006), Russian (e.g., Maksimovich, 2012), Spanish (e.g., Sano et al., 2006), etc. (for worksheet in pdf-format in 80 dialects see also http://alzheimer.wustl.edu/cdr/aboutcdr.htm for more languages); it is used worldwide.

Reliability

All reliability data are based on studies with trained raters that used the same interview manual in order to rate the CDR.

Inter-Rater Reliability

Inter-rater reliability in a pilot study with 35 subjects reported by Hughes et al. (1982) was $r = .89$. In their longitudinal study with 123 subjects, raters disagreed on the CDR score of six persons. In a study run by Morris, Ernesto, Schafer and Coatsc (1997), inter-rater agreement was found to be 83 %, especially the degrees 2 and 3 (moderate and severe dementia) showed 96 % versus 97 % agreement, respectively, and differentiation of levels 0 versus .5 (not dementia vs. questionable) was apparently less evident (66 % agreement). Schafer et al. (2004) report 87 % agreement among raters for the global CDR score, and for the box-scores percentages lie between 72 % and 87 %; Kendall Tau and Kappa for the global score amounted to .93 and .83, respectively. In sum, inter-rater reliability can be qualified as good to excellent.

Internal Consistency (Standardized Alpha)

The range of standardized alpha reported is between .71 and .98 for the global score, dependent on the study; scores for single domains or a group of subdomains (cognitive, functional) are a bit lower (e.g., Coley et al., 2011; Galvin et al., 2009).

Test-Retest

In their prospective study, Hughes et al. (1982) reexamined 90 of the 123 subjects 6–9 months later; ratings were done by independent raters ignoring the former results. Results show that CDR scores at Time 2 remained stable or indicated deterioration (exempt one subject, whose ratings changed from .5, *questionable dementia*, to 0, *no dementia*, thus confirming the doubts at Time 1).

Validity

Content and Face Validity

The domains to be rated correspond directly to diagnostic criteria of the DSM-IV (American Psychiatric Association, 1994).

Construct Validity

Convergent Validity. In their study with 123 subjects (with CDR scores 0, .5, and 1), Hughes et al. (1982) found substantial correlations of the CDR with three screenings that up to then had been used to detect dementia or to determine cognitive decline: the *Dementia Scale* of Blessed, Tomlinson, and Roth (1968), $r = .74$; the *Short Portable Mental Status Questionnaire (SPMSQ)* of Pfeiffer (1975), $r = .84$; and the *Face-Hand Test* of Fink, Green, and Bender (1952), $r = .57$. With respect to the differentiation of advanced stages of dementia, no correlations are told; however, with exemption of the *SPMSQ* means of the scales augment with stage as described by the CDR.

In a French study comprising 667 subjects (Coley et al., 2011), moderate correlations were observed to the Mini-Mental State Examination (MMSE; Folstein, Folstein, & McHugh, 1975; $r = -.66$) and to the Alzheimer's disease Assessment Scale (ADAS-Cog; Rosen, Mohs, & Davis, 1984; $r = .65$).

For a Brazilian sample, Fagundes Chaves et al. (2007) report high correlations of CDR with MMSE ($r = -.77$) and even higher with the Blessed *Dementia Scale*($r = .98$).

Hobson, Hall, Humphreys-Clark, Schrimsher, and O'Bryant (2010) used an CDR score on the basis of the informant interview; they examined the relation of a neuropsychological test battery (RBANS) to CDR. They showed that

neuropsychological indices of language and immediate memory on the one hand were significantly correlated to all CDR scores except orientation; attention, visuospatial construction, and delayed memory on the other hand were not related.

Dooneief, Marder, Tang, and Stern (1996) successfully used the extended CDR to predict nursing home admission and (shortened) survival.

Discussion

The CDR is a reliable and valid instrument to characterize the actual stage of a patient with regard to possible dementia (or its absence). It should be underlined that a certain experience and/or training contribute to both reliability and validity of this tool (for an online trainingprogram see http://alzheimer.wustl.edu/cdrtraining/browsebtrp/group1_application.htm). Worldwide research shows that it has been translated in many languages; evidence for reliability and convergent validity could be shown across various cultures; it is therefore not only a suitable working tool but also helpful and precious for cross-cultural research.

Cross-References

- ▶ Dementia and Self-Reported Purpose in Life
- ▶ Dementia Quality of Life Instrument

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Clinical Depression Questionnaire

► IPAT Depression Scale

Clinical Global Index Scale (CGI)

► Caregivers of Patients with Eating Disorders, Quality of Life

Clinical Significance

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Definition

Clinical significance refers to a situation or status that carries with it important interpretive weight. As opposed to statistical significance, which determines whether some observation was not likely to be due to chance, clinical significance centers on change that is of sufficient strength and/or intensity that is of interpretive value and practical importance. Whether this is related to behaviors of such extremeness that they warrant a clinical diagnosis (or the reduction in the extremeness of behavior that warrant the removal of a diagnosis), or change of sufficient magnitude as to have important, observable implications

for behavior, clinical significance focuses on qualities of a situation or person that have relevance to practice (Fayers & Machin, 2007).

Cross-References

- ▶ Effect Size
- ▶ Reliable Change Index
- ▶ Significance, Statistical

References

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Clinically Significant Change

- ▶ Reliable Change Index

Clinician-Patient Communication

- ▶ Patient-Physician Communication

Clinimetrics

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Synonyms

Causal and effect indicators

Definition

Clinimetrics refers to the assessment of clinical and personal phenomena of importance to patient care, through the application of quantitative measures such as indices, scales, and inventories. The aim of clinimetrics is to ensure the human and clinical relevance of a measurement system, as well as its scientific quality.

Description

The term clinimetrics was first coined by Feinstein (1982) to describe a new approach to ensuring the clinical validity of measures which quantify patient experiences. The introduction of this new paradigm reflected a degree of discontent with the psychometric methods traditionally used in the development of multi-item health measurement scales, in which the scores from a number of items are combined into a single summary score. Psychometric strategies rely on statistical techniques and generally aim to develop a measure which is mathematically valid and reliable, which usually means that a degree of item homogeneity (e.g., as measured by Cronbach's alpha) is valued. However, the properties which result in homogeneity may also reduce a scale's sensitivity to change (Wright & Feinstein, 1992) and therefore their usefulness in a clinical setting. According to Feinstein (1999), the superiority of clinimetric strategies lies in their reliance on the opinions of patients and clinicians thereby allowing the development of measures with good face validity, which make "clinical common sense." This approach is therefore concerned less with the homogeneity of scale items and more with their clinical relevance to a phenomenon. Thus, in Feinstein's view, clinically relevant scales require different attributes to traditional psychometric scales, and so their development and validation should follow a different process.

Despite a difference in aims and strategy, in practice there is some overlap between clinimetrics and psychometrics. Item generation is similar for both paradigms and usually includes the derivation of an initial item pool based on a combination of literature review and focus groups or interviews with the target population and relevant professionals.

The divergence in methods lies in deciding which items to keep. The clinimetric strategy relies on the ratings of patients and clinicians to determine which items to include in the final scale. Typically patients may be asked to rate the importance of each of the items in the initial pool on a five-point scale from "not at all important" to "extremely important" so that a mean importance score can be determined for each item. The items with the highest scores will then be selected for the scale. Item selection using the psychometric approach usually relies on factor analysis, a statistical method which organizes items into factors according to their relationships with one another. Items selected for each scale therefore tend to have good homogeneity. Selection of items has been found to differ for the two methods, even when starting with the same item pool (Juniper, Guyatt, Streiner, & King, 1997; Marx, Bombardierm, Hogg-Johnson, & Wright, 1999) – that is, the items patients perceive as important are not necessarily the same as those which show statistical importance. However, it is also possible to combine both patient and statistical judgments in the choice of final items. The methods used to confirm the reliability and validity of a new measure are also similar for both psychometrically and clinimetrically derived measures and include content and construct validity, reproducibility (test-retest reliability), and responsiveness (or sensitivity) to change.

Clinimetric and psychometric approaches may have different but complementary roles to play in the development of health-related quality of life measures. Fayers, Hand, Bjordal, and Groenvold (1997) suggested that items in a measure of health-related quality of life can be categorized in two ways: either causal or effect indicators. Causal indicators include symptoms or side effects of a disease or illness that may result in reduced quality of life (e.g., shortness of breath, vomiting, or pain). In contrast, effect indicators are items which reflect reduced quality of life (e.g., anxiety, depression, or hopelessness). Effect indicators tend to have a great deal of homogeneity since people with poor quality of life tend to experience similar psychological outcomes such as anxiety or depression. Thus, according to Fayers, combining a number of effect indicators into a single summary scales is likely to result in a measure with good internal consistency. Using psychometric methods to develop measures comprised of effect indicators is therefore acceptable. Causal items however are likely to be more of a challenge to psychometric approaches, since the clinical features of an illness that lead to reduced quality of life may differ across a patient population. Combining these items into a single scale will be less reliable or valid, and the use of a clinimetric approach to the development of this aspect of a scale is likely to be more successful. Causal items should be thought of as creating composite scales, which are more heterogeneous than those comprised of effect indicators alone. Rather than aiming for high internal consistency, it may be more important to group items together which make good clinical sense.

Thus, while there are some differences between psychometrics and clinimetrics, the complementary nature of the two approaches is evident. As Feinstein (1999) notes "each has its own merits . . .. . . sometimes the best approach is to use both methods."

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ClinRO – Clinician-Reported Outcome

▶ Translating Health Status Questionnaires/ Outcome Measures

Closed Community

▶ Gated Communities

Closed-Ended Question Format

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Synonyms

Dichotomous questions; Forced choice-type questions; Multiple-choice questions

Definition

Close-ended questions are also referred to as dichotomous, multiple-choice, or forced choice-type questions. Possible responses are all discrete and may be scaled, unscaled, and limited to single responses or allow multiple responses (choices). They are the opposite of open-ended questions with no predefined responses provided.

Description

Richardson (no date) notes that closed-ended questions are useful because they are "quick and require little time investment" yet can present challenges because they "require more time with inarticulate users, can be leading and hence irritating or even threatening to the user, can result in misleading assumptions/conclusions about the user's information need, and can discourage disclosure." Closed-ended questions are best when there are certain, discrete choices that represent the full range of possible responses.

Waddington (2006) writes in the Encyclopedia of Education Technology that the closed-ended question is an effective tool for researchers when generating a survey and for "collecting rank-ordered data, when all response choices are known." According to Waddington's (2006) entry, there are five styles of closed-ended questions: the ▶ Likert scale (where responses are measured on a scale, i.e., strongly disagree–strongly agree), multiple-choice questions (where respondents choose one answer from a group of possible options), ordinal questions (where questions are ranked in order, i.e., most likely–least likely), categorical questions (possible answers are in categories and the respondent must identify or belong to a category), and numerical questions (the answer is a number) (Source: http://ucla245.pbworks.com/w/page/8751361/Closed Ended Question).

Examples.

Do you watch television?
- ○ *Yes*
- ○ *No*

Please enter your gender.
- ○ *Male*
- ○ *Female*

What is your level of satisfaction with the policy?
- ○ *Very satisfied*
- ○ *Somewhat satisfied*
- ○ *Neutral*
- ○ *Somewhat dissatisfied*
- ○ *Very dissatisfied*

Cross-References

▶ Survey Administration
▶ Survey Research
▶ Survey Responses with Insufficient Effort

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Closeness to Death

▶ Objective and Subjective Nearness to Death

Cloud Computing

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Synonyms

Informational technology computational paradigm; IT Environment

Definition

Cloud computing consists of three categories of services. How one makes use of the cloud depends on the mix of services one employs: (1) Software as a Service (SaaS) involves running software applications accessed through an Internet service provider. The concept is one of accessing software on demand for the work needed to be done. Google docs is an example of SaaS. (2) Platform as a Service (PaaS) consists of organizing through a service provider a computational configuration for development work. PaaS provides an integrated development environment. (3) Infrastructure as a Service (IaaS) is a fully outsourced computational environment on the Internet. The choice of server hardware and storage is provided to the end user who accesses this infrastructure over the Internet.

Description

Each of the past four decades has been dominated by a particular information technology computational paradigm. (1) During the 1970s, data processing was performed primarily through terminals connected to mainframe computers that were accessed through time-sharing operating systems. All Information Technology (IT) resources were attached to the mainframe system, including printers and storage. (2) The desktop workstation established its dominance in the IT environment in the 1980s. Data processing shifted from the mainframe to the personal computer. (3) By the 1990s, local area networks had emerged to support desktop computing by providing access to network-located storage devices and printers. The Internet became an extension of local area networks in the middle 1990s providing access to services offered over the World Wide Web. Data processing was still an activity occurring on desktop applications, but information and data were being delivered over the Internet. (4) In the 2000s, data processing began to shift from the desktop workstation to services available on the Internet. At the beginning of the decade, the desktop environment absorbed the balance of the processing load, but as the decade ended, this processing load was increasingly shifting to services on the Internet dedicated to specific applications. Examples of this include the collaborative office tools of Google Apps, Doodle's meeting scheduler, and Amazon's Elastic Compute Cloud (EC2). This type of computing environment is called "cloud computing."

Early diagrams of this computing environment showed a desktop workstation attached to a local area network that had a connection to the Internet. A cloud was used to represent the myriad of services existing on the Internet. Hence, this type of data processing became identified as "cloud computing." Operationally, the cloud has a number of third-party vendors providing a wide

range of services that earlier were run on mainframes or desktop computers. Two of the biggest challenges for social science researchers have been (1) to acquire a desktop computer with enough computational power to do large-scale data processing tasks and (2) to purchase, install, and operate application software that permits them to conduct their research.

The solution to the second challenge was the creation of local area networks. Specifically, when the mainframe was replaced by personal computing, the desktop user had to become her or his own systems manager. This was no small task. The creation of networks in the local area allowed software to be managed for individual local machine use. This did not alleviate the problem for large-scale computing power, however.

Some of the computationally intensive sciences, such as chemistry, physics, and astronomy, began developing compute grids to address their demands for large-scale computing power. They developed software to knit national and international high-speed research networks into large files systems that would deploy data for processing on multiple machines connected across their wide area network (WAN; see, e.g., ▶ Canadian Research Data Centre Network). Concurrent with these developments was the emergence of large commercial services on the Internet, such as Google and Amazon. These companies needed their own large computational services to process the massive volume of information and data required by their services. Companies like Google and Amazon also began to offer applications over the Internet that were managed through a Web browser running on a desktop workstation but processed on a server located in the "cloud." For example, word processing and spreadsheets became Web applications located on the Internet without the need for software to be installed and run on a desktop computer. Similarly, storage and printing services became Internet based, moving the requirement for such services on a local area network to the Internet. In 2008, Amazon released a production version of its compute services, EC2, providing customers with the scalable computational power that they need. Each user of EC2 is given a virtual machine providing her or him with the operating system and applications required for data processing. Virtualization allows deploying whole computational environments, i.e., an operating system and applications, in this shared environment.

How one makes use of the cloud depends on the mix of the three categories of services one employs: (1) Software as a Service (SaaS) involves running software applications accessed through an Internet service provider. The concept is one of accessing software on demand for the work needed to be done. Google docs is an example of SaaS. (2) Platform as a Service (PaaS) consists of organizing through a service provider a computational configuration for development work. PaaS provides an integrated development environment. (3) Infrastructure as Service (IaaS) is a fully outsourced computational environment on the Internet. The choice of server hardware and storage is provided to the end user who accesses this infrastructure over the Internet.

Thin client computing is a network model for providing computational power to users without the need for large, powerful desktop workstations. A server dedicated to performing computational work (a compute server) is located somewhere on the Internet with accounts allowing users on the WAN to connect from a remote workstation that does not require a lot of computational power. The remote workstation primarily supports the "client" application that interacts with the compute server. This end-user device primarily supports the display of output from the compute server. There are variations of this shared computational model. A "fat client" involves the attachment of a workstation that has the power to do its own processing. A central server may provide the fat client with a virtual computational environment, but all input and output are controlled from the central server.

The emerging computing environment of the next decade will be based on "community cloud computing." This will manifest itself through a tailored computational environment in which the services needed by a specific community will be organized and supported. One can envision a social sciences community cloud in which

online full-text articles, grant submission tools, metadata services, data access services, data management services, data analysis tools, authoring tools, online publishing tools, peer-review management tools, and data preservation services all interoperate over the Internet. Through a Web browser, a researcher will be able to chain services together to represent the research process as he or she needs. Many of these services are already online but function on a stand-alone basis, just as many applications on personal computers were stand-alone before programs were integrated into office suites. The cloud's environment will provide the interoperability in this new computing paradigm.

Cross-References

► Canadian Research Data Centre Network

Clowns

► Humor

Cluster Analysis

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Synonyms

Classification analysis; Clustering; Unsupervised learning

Definition

The term *cluster analysis* denotes a family of unsupervised methods (the training set is not labeled) which are able to identify groups (clusters) in a multidimensional space. A cluster is a collection of similar objects (people, animals, documents, chemical elements, stars, etc.) which are *dissimilar* to objects in other clusters.

These methods belong to a larger group of classification techniques.

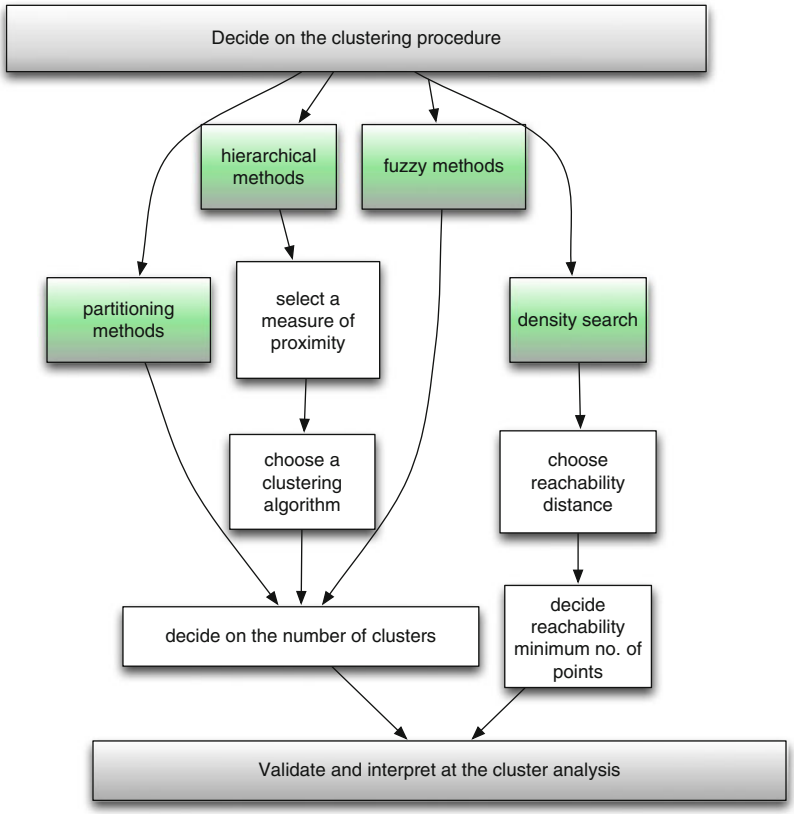
CA is fundamental to most branches of science, such as biology, market research, astronomy, psychiatry, archeology, linguistics, bioinformatics, and genetics.

Description

Cluster analysis became an increasingly popular method of multivariate analysis in the 1950s. In literature the expression cluster analysis has several interpretations. Everitt (1974) and Gordon (1999) use the terms *cluster analysis* and *classification* interchangeably, for describing methods of analysis which seek to group individuals. More frequently classification is used as an umbrella word that is referred to as unsupervised pattern recognition or ► unsupervised learning.

The history of cluster analysis is linked to the development of computer algorithms, which allowed the development of increasingly efficient algorithms. The literature on cluster analysis is enormous. Fortunately, the Classification Society of North America publishes an annual bibliography, *Classification Literature Automated Search Service*, based on citification to *classic* articles and books compiled by the Institute for Scientific Information. The success of these techniques is due to its applications in many disciplines, such as biology, botany, medicine, psychology, geography, marketing, image processing, and archeology. In recent years, text-clustering methods have been developed for text mining. This approach is used to automatically classify large sets of text or hypertext documents (Feldman & Sanger, 2006).

A comprehensive review of cluster analysis is given by Cormack (1971), but it should be mentioned the monographs of Sneath and Sokal (1973), Duran and Odell (1974), Hartigan (1975), Jardine and Sibson (1971), Anderberg (1973), Everitt (1974), Spath (1980),



Cluster Analysis, Fig. 1 Steps for performing the more used cluster analysis techniques

Gordon (1999), Kaufman and Rousseeuw (1990), and recently Everitt et al. (2011).

Everitt (1974) classifies cluster analysis techniques into five basic types:

1. *Hierarchical methods*, in which the classes are themselves classified into groups, the process being repeated at different levels to form a tree
2. *Partitioning techniques*, in which the classes are mutually exclusive, thus forming a partition of the set of entities
3. *Density or mode-seeking techniques* in which clusters are formed by searching for regions containing a relative dense concentration of entities
4. *Clumping techniques*, in which the classes or clumps can overlap and a clamp and its complement are treated as different types of class
5. *Other methods* which do not fall clearly into any of the four previous groups

Currently, we can find many other categorizations of clustering methods, like as *finite mixture densities*, in which a formal statistical model for the population from which the data are sampled (De Soete & Carroll 1996; Everitt et al., 2011). There remain a substantial number of other methods that we can group into a miscellaneous class. This category could contain several subclasses:

– *Density search*, where objects are depicted in a metric space. In this case, it should be part of the space in which the points are very dense, separated by parts of low density. An algorithm largely used is DBSCAN (density-based spatial clustering), proposed by Sander et al. (1998), that classifies objects into clusters (dense regions) or noise (objects in low-density regions).
– *Simultaneous clustering of objects and variables or biclustering* (Van Mechelen, Bock, & De Boeck, 2004; Hartigan, 1972).

– *Constrained clustering*, where the membership of clusters is to be restricted in some way, which often occurs when objects and clusters need to retain their spatial relationship (Basu, Davidson, & Wagstaff, 2008).
– *Fuzzy methods*, where objects are not assigned to a particular cluster. They possess a membership function indicating the strength of membership in all or some of the clusters (Bezdek, 1981).
– *Neural networks* refer to artificial neural networks, which are composed of artificial neurons or nodes (Cheng & Titterington, 1994; Ripley, 1996).

These categories are not mutually exclusive.

Hierarchical approach includes:

1. Agglomerative methods (buildup)
2. Divisive methods (breakdown)

Agglomerative methods start with all observations as their own cluster. Using the selected similarity measure, combine the two most similar observations into a new cluster, now containing two observations. They repeat the clustering procedure using the similarity measure to combine the two most similar observations or combinations of observations into another new cluster. Continue the process until all observations are in a single cluster.

The most used algorithms are:

Single linkage (nearest neighbor)
Complete linkage (farthest neighbor)
Average linkage
Centroid method
Ward's method

In nonhierarchical approaches, it is necessary to:

- Specify cluster seeds.
- Assign each observation to one of the seeds based on similarity.

To perform a procedure of cluster analysis, Milligan (1996) detects seven steps, and Everitt et al. (2011) added some additional points (step 3 and step 9):

Step 1. *Objects*: Should be representative of the cluster structure. Objects could be randomly sampled or nonrandom sampled. If objects are selected with a nonrandom procedure, it will not be possible to use inferential techniques.

Step 2. *Variables*: At the beginning of the clustering process, we have to select appropriate variables for clustering. Data can be quantitative, qualitative (nominal and ordinal scales of measurement), and mixed. Gower's similarity coefficient is one of the most popular measures of proximity for mixed data types (Gower, 1971).

Step 3. *Missing values*: When the proportion of missing value is low, imputation of the data may be acceptable. Alternatively, all objects for which data are missing on at least one variable can be deleted (listwise deletion method). It is also possible to add an additional level to denote missing data.

Common solutions are to fill in the missing values (imputation) if the proportion of these is low; to ignore the missing data (▶ Marginalization), all objects for which data are missing on at least one variable can be deleted. It is also possible to add an additional level to denote missing data.

Step 4. *Variable standardization*: A methodological problem in applied clustering involves the decision of whether or not to standardize the input variables prior to the computation of (dis)similarity measure. Milligan and Cooper (1988) presented the results for eight standardization strategies.

Step 5. *Proximity measure*: A measure of similarity or dissimilarity must be selected.

Step 6. *Clustering method*: Methods used should be those designed to recover the type of clusters suspected to be present. This is important, as different types of clustering method are better at finding different types of cluster structures.

Step 7. *Number of clusters*: This is the most difficult decision to be made in cluster analysis. It is especially troublesome if there is no prior information as to the number of clusters expected to be in the dataset. There are several different rules that can be followed for the selection of the most suitable number of

clusters. The choice is not based on scientific theory, and the solution selected should be judged on its usefulness rather than being a correct representation of the patterns within the dataset.

Step 8. *Validation results*: Cluster validation refers to the quality of a clustering solution. Theodoridis and Koutroubas suggest three approaches to investigate on cluster quality: internal, external, and relative criteria. Internal measures assess the results with respect to information intrinsic to the data. External measures evaluate the results with respect to a prespecified structure. Relative measures calculate clustering structure by comparing it to other clustering schemes produced by the same method, but with different input parameter values.

Step 9. *Interpretation*: Graphical representation and descriptive statistics may help to interpret clustering solution.

Cross-References

- ▶ Marginalization
- ▶ Standardization
- ▶ Unsupervised Learning

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Cluster Randomization Trial

- ▶ Cluster Randomized Trial

Cluster Randomized Controlled Trial

- ▶ Cluster Randomized Trial

Cluster Randomized Trial

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Synonyms

Cluster randomization trial; Cluster randomized controlled trial; Group randomized trial; Place randomized trial

Definition

A *cluster randomized trial* is a research design in which groups, rather than individuals, are randomized to study conditions. Cluster groups can represent social units, place-defined groups, or geographically defined units. Examples of groups in which individuals are clustered are medical clinics or hospitals (patient clusters), schools (student clusters), worksites (employee clusters), households (family members), or geographically defined communities or neighborhoods (clusters of residents living in defined areas). Assignment to intervention/treatment conditions is done by group clusters, often because individuals cannot be randomized independently to conditions; however, effects on individuals' responses are typically the research outcomes of interest. The nonindependence of participants requires specialized study design planning (e.g., power estimates) and statistical analysis procedures that take participant clustering into account.

Description

In medical research, the randomized clinical trial has been considered the gold standard of research designs, when it is feasible to randomly assign participants to treatment conditions. However, in research on medical practice and "lifestyle" influences, independent randomization of individuals to study conditions often is not possible due to formal or informal "clustering" of potential research participants (Donner & Klar, 2000; Murray, 1998). Thus, the "group" or cluster randomized design has become the standard when identifiable groups can be allocated to conditions to evaluate treatment or intervention effects on individuals (Murray, Varnell, & Blitstein, 2004).

There are both advantages and disadvantages to using cluster randomized trials. A primary advantage is that the design can be used when random assignment of individuals is not cost-effective or even feasible (Donner & Klar, 2000; Murray, 1998). Especially with nontherapeutic, educational, or behavioral lifestyle interventions, it may not be possible to randomize individuals to conditions or assume participant independence. A cluster randomized design is ideal when the intervention is best suited for delivery at a group level (e.g., training hospital providers on procedures that will improve patient health outcomes and quality of life, delivering an educational or media-based intervention aimed at changing the behavior of community members). Cluster randomized designs also help avoid comparison group contamination due to a common influence or environment (e.g., both go to the same medical clinic and have the same physician) or due to participants in treatment conditions sharing information. Such contamination can attenuate any condition effects (Campbell, Elbourne, & Altman, 2004; Donner & Klar, 2000; Murray et al., 2004).

In comparison with clinical trials having randomization at the individual level, cluster randomized designs have several disadvantages. They are more complex to design (e.g., to ensure adequate power), require more complex statistical data analysis, and are less efficient in that more participants are needed to achieve equivalent statistical power (Campbell et al., 2004). Often the unit of random assignment (i.e., cluster) is not the unit of analysis (e.g., individual) in

cluster randomized trials. A key issue is the nonindependence of participants within clusters, with the expectation that their observations will show some degree of correlation (Donner & Klar, 2000; Murray, 1998; Murray et al., 2004). Within-group correlation (i.e., intraclass correlation, ICC) indicates that between-cluster variance is an additional component above and beyond the variance expected with random assignment of individuals to conditions. Ignoring this extra variation can lead to an inflated type I error rate, with the impact worse with higher ICC's, fewer clusters, or even low ICC's with large cluster sizes (Murray et al, 2004).

When designing cluster randomized trials and determining adequate sample sizes, an adjustment must be made to get the appropriate sample size for a given power level. Because there is a reduction in effective sample size due to the additional cluster-related variance, the sample size should be multiplied by a variance inflation factor (VIF) or "design effect" $= 1 + (m\text{-}1)\rho$, where m is the average cluster size and ρ is the ICC. Furthermore, specialized analysis procedures that can account for the dependency of data collected within group clusters must be used. Examples include multilevel generalized linear regression, with models that can include random intercepts and slopes, accounting for multiple sources of clustering effects, as well as different types of data (e.g., continuous or binary) with normal and non-normal distributions (Campbell, Donner, & Klar, 2007; Donner & Klar, 2000; Murray, 1998; Murray et al., 2004).

Lastly, research planners should consider various reporting and ethical concerns specific to cluster randomized trials (Campbell et al., 2004; Weijer et al., 2011). Careful consideration must be given to issues such as the following: (a) exposing additional individuals to risk (e.g., to achieve adequate statistical power); (b) selection bias (or nonparticipation bias) of individuals within the randomized clusters; (c) identifying who the research subjects are (e.g., medical providers that the intervention is aimed at or the patients that providers are treating); (d) applying and documenting appropriate informed consent procedures – from whom, how, and when obtained; (d) determining whether benefits outweigh risks and how to deal with vulnerable groups within clusters; and (e) applying principles of beneficence, justice, and respect for persons and communities in the particular circumstances found in cluster randomized trials (Weijer et al., 2011).

Cross-References

- ▶ Hierarchical Linear Modeling
- ▶ Intraclass Correlation Coefficient (ICC)
- ▶ Mixed Effects Models
- ▶ Power to Detect Meaningful Effects
- ▶ Type I Errors

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Clustering

- ▶ Cluster Analysis

COA – Clinical Outcomes Assessment

▶ Translating Health Status Questionnaires/ Outcome Measures

Coaching, Quality of Life

▶ Quality of Life-Therapy

Coefficient of Stability

▶ Test-Retest Reliability

Coercion, Sexual

▶ Dating Violence

Coercive Control in Dating

▶ Dating Violence

Coexistent Diseases

▶ Multimorbidity or Comorbidity

Cognition

▶ Cognitive Function

Cognitive Abilities

▶ Cognitive Function

Cognitive Behavior Therapy with Children

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Synonyms

Behavior therapy with children; CBT; Cognitive theory with children

Definition

Cognitive behavioral therapy (CBT) refers to a large group of psychological therapies that focus on changing an adult or child's maladaptive cognitions (thoughts, approaches to problem solving, social perception), emotions (depression, anxiety, anger), or behaviors (aggression, withdrawal, disobedience, avoidance). Therapists using CBT often view cognitions, emotions, and behaviors as interrelated; e.g., negative thoughts can lead to depression and withdrawal. CBT practitioners place less emphasis on insight and/or the historical development of a problem, focusing instead on helping the individual develop more positive and self-enhancing cognitions, emotions, and behaviors – the ultimate goal is reducing maladaptive behaviors and increasing positive and adaptive behaviors resulting in improved quality of life for the child.

Description

Historically, roots of CBT were based in the early applications of behavior analysis and learning theory to human problems. Three works provided the early basis for modern-day CBT. Joseph Wolpe (1958) demonstrated that anxiety could be reduced by having the individual use relaxation techniques when faced with anxiety arousing situations. Albert Ellis (1962), in his

development of rational emotive therapy (RET), postulated that the event itself was not the issue. Rather, it was the individual's interpretation of the event, manifested through their thoughts or beliefs, which yielded the dysfunctional patterns. Thus, changing thoughts and beliefs about the event would help reduce emotional problems and facilitate high life quality. Finally, Aaron Beck's cognitive therapy (Beck, Rush, Shaw, & Emery, 1979) shared some similar aspects of Ellis' RET but focused more on the individual's cognitive distortions and errors when interpreting the event. Although initially developed to treat depression in adults, the therapy has been applied with a wide range of psychological difficulties. In the child and adolescent area, Kendall's (1991) first edition of his book on child and adolescent therapy represents an important work in advancing CBT with younger populations.

A full discussion of all the different therapies and interventions that fall under the CBT umbrella is beyond the scope of this entry. All of the techniques are designed to improve the child's quality of life across multiple domains (e.g., home, school). Some of the more widely used techniques for children include:

- Problem-Solving and Social Skills Training: Both Problem-solving and social skills training involve teaching children more effective ways of coping with environmental stressors. Problem-solving steps include problem identification, generating options for solving the problems, and developing and carrying out a plan, with each of these steps taught in sequential order. Social skills training has two primary components. The first component involves the direct teaching of specific social skills (e.g., greeting skills, negotiating a conflict). This component relies heavily on modeling and role-playing. The second component in social skills training, although not utilized in all treatments, involves helping clients to more accurately perceive social situations and analyze the associated social cognitions. Problem-solving training and social skills training both provide a skill set for children to more effectively and positively navigate their social environments, which in turn yields a sense of mastery and positively influences self-esteem.
- Relaxation Training, Anxiety Management Training, and Desensitization: These three techniques are primarily used to minimize the impact of anxiety. Relaxation training involves directly teaching children to relax themselves. There are a variety of methods to teach relaxation including deep muscle relaxation exercises, deep (diaphragmatic) breathing, and visualization techniques. Anxiety management training helps the children identify situations that may be stressful or anxiety arousing (e.g., giving a speech) and then to utilize relaxation prior to and/or during a situation. Desensitization is generally a gradual deconditioning or reconditioning process that uses relaxation to reduce learned anxiety responses to specific situations. These anxiety reducing techniques contribute to an increased sense of well-being across situations. Relaxation training alone is often used in a variety of health promotion and wellness programs.
- Cognitive Restructuring and Socratic Questioning: Cognitive restructuring involves a variety of techniques to change or reduce maladaptive thoughts or cognitive distortions and/or increase more adaptive thought patterns. Socratic questioning is a therapeutic technique where the therapist challenges a distorted cognition or belief of a child or adolescent. In effect, the child is asked to defend the cognition or belief, which typically results in a positive modification of the belief. Both techniques focus on reducing negative or maladaptive thoughts that interfere with daily functioning and replace these thoughts with more positive cognitions (including adaptive coping strategies).
- Self-Monitoring: Self-monitoring involves teaching the client to record behaviors, social-emotional responses, and thoughts that they wish to modify in some fashion. It may involve some type of self-reward as well. The goal is to reduce maladaptive behaviors and thoughts and increase positive and more functional behaviors and thoughts. Children achieve a better sense of self-control and the techniques often enhance self-esteem.

Relationship Between CBT and Quality of Life Among Children and Adolescents

Although the effectiveness of various CBT interventions has been extensively studied with both child/adolescent and adult populations, most studies have focused on symptom reduction. A few studies have directly examined quality of life variables. Ruini, Belaise, Brombin, Caffo, and Fava (2006) compared the effectiveness of school-based CBT and well-being therapy (WBT). The primary difference between the two treatments was that CBT focused on reducing negative beliefs and cognitions, while WBT focused on helping students recognizing, sharing, and experiencing positive emotions. Results found that CBT and WBT were equally effective in reducing symptoms and increasing psychological well-being. Venning, Kettler, Eliot, and Wilson (2009) conducted a systematic review focusing on CBT with and without "hopeful" (positive and future-oriented cognitive skills) elements in the treatment of depression in young people. These researchers could only identify a small number of studies that delineated the hopeful elements, and they were cautious in their conclusions. However, they did find indications that CBT that included hopeful elements appeared to have stronger impact in preventing depression than CBT without the hopeful elements.

CBT is clearly established as a primary treatment option for treating children and adolescents presenting with a variety of social-emotional and behavioral problems. While there is good evidence that the broad range of CBT treatments are effective, findings related to child/adolescent quality of life are scant. Emergent areas of research on this topic are promising, although other individualized treatments techniques may be just as effective as CBT on quality of life promotion. Future research may also need to consider key mechanisms that transcend therapeutic modalities and their influence on quality of life enhancement. Factors such as therapeutic alliance, modes for providing feedback, and therapist variables may enhance explanations of the benefits/outcomes of specific techniques in the promotion of life quality across specific domains (see Zirkelback & Reese, 2010).

Cross-References

- ▶ Adolescent Life Satisfaction Measurement
- ▶ Adolescent Problem Behavior
- ▶ Child and Family Well-Being
- ▶ Counseling
- ▶ Emotional Well-Being
- ▶ Well-Being, Student

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Cognitive Function

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Synonyms

Cognition; Cognitive abilities; Intelligence; Mental functioning; Neuropsychological function; Thought

Definition

Cognitive function is a broad term that refers to mental processes involved in the acquisition of knowledge, manipulation of information, and reasoning. Cognitive functions include the domains of perception, memory, learning, attention, decision making, and language abilities.

Description

Classical models of human cognition have been conceptualized by cognitive scientists within an information processing paradigm. This approach is grounded by a computational metaphor which draws an analogy between mental operations with the functioning of a computer. Although the central nervous system is recognized as the mechanism underpinning cognition under this approach, a distinction between the brain and cognition is likened to the relation between computer hardware (often referred to as "wetware") and computer software. Historically, two competing information processing explanations have dominated debates concerning cognition; these have viewed cognition as either symbol manipulation processes (cognitivism) or a neural network of inhibitory and excitatory connections (connectionism). However, post-cognitivist theories have rejected the focus on representation that is characteristic of these computational perspectives. Rather, contemporary theories of cognition have emphasized a dynamic interaction between embodied systems and their environmental contexts (Calvo & Gomila, 2009). Cognitive functioning is often described as an interaction between co-occurring top-down and bottom-up processes. Top-down processes are driven by higher-level abstract concepts and schema. They refer to the role that knowledge and expectations shaped be previous experience play in the processing of information. Conversely, bottom-up processes reflect the role of lower-level and concrete sensory inputs in driving cognition.

Psychologists, whose work is orientated by the disciplines of psychometrics and individual differences, have provided important insights into the human cognitive architecture, particularly in relation to measurement and assessment of cognitive functioning. These perspectives often refer to "cognitive abilities" or "intelligence" and emphasize the multidimensional and hierarchical nature of cognitive constructs, pointing out that they comprise a number of functional domains. For example, John Carroll's three-stratum model identifies a general level of intelligence at the hierarchical apex (stratum 3), eight broad abilities at an intermediary level (stratum 2), with each broad factor comprising a number of subfactor narrow abilities (stratum 3) (Carroll, 1993). Another important example of the hierarchical and multidimensional nature of cognition are the executive functions, which are a set of complex higher-order cognitive processes responsible for the planning, implementation, coordination, and monitoring of goal-directed behavior. Executive functions are important for judgment, decision making, problem solving, and situational appraisal; they include specific cognitive processes most strongly associated with frontal lobe functioning such as inhibition, working memory, and attention (Salthouse, 2005). The executive functions are associated with performance of activities of daily living, and consequently their impairment can indirectly impact on a person's quality of life via acquired functional limitations and disability.

Arguably, older adults comprise one group for whom cognitive function is most commonly implicated in quality of life issues, and the study of cognitive aging has revealed a number of relevant insights into the multi-directional progression of cognitive development, which again highlight the factorial structure of cognition. Lifespan developmental psychologists have identified two broad clusters of cognitive functions which can be distinguished by the way in which they change throughout adulthood, namely cognitive mechanics and cognitive pragmatics (Baltes, Staudinger, & Lindenberger, 1999). Cognitive mechanics are primarily determined by neurophysiology and from midlife typically undergo age-related declines that accelerate in late life, in parallel with patterns of brain ageing in the prefrontal cortex and medial temporal lobe. Cognitive mechanics are content

poor and conceptually similar to executive function, incorporating processes that rely on short-term storage and manipulation of information involved in abstract reasoning and novel problem-solving tasks, such as processing speed, spatial orientation, and working memory. In contrast, cognitive pragmatics are content-rich verbal and numerical abilities that rely on acculturation, declarative knowledge, expertise, and semantic memory. Cognitive pragmatics are expected to remain stable throughout adulthood and do not show normative declines in ability levels with age. In their two-factor theory of intelligence, Horn and Cattell refer to these as fluid abilities and crystallized abilities (Horn & Cattell, 1967).

Given its multidimensional nature, there is an obvious need for reliable and precise measurement of cognitive function. Standardized instruments developed using psychometric methods are used to assess both generalized and domain-specific cognitive function in clinical and research settings. Domain-general cognitive screens, such as the Mini Mental State Examination (MMSE) (Folstein, Folstein, & McHugh, 1975), are designed for clinical purposes to identify persons with impaired levels of global cognitive functioning. Because of this, they typically have strong ceiling effects and lack the precision to assess ranges of normal adult functioning. Examples of common neuropsychological tests used to assess cognitive functioning within the general population include the 4th edition of the Wechsler Adult Intelligence Scale (WAIS-IV) (Lichtenberger & Kaufman, 2009) and the Cambridge Neuropsychological Test Automated Batteries (CANTAB) (Fray, Robbins, & Sahakian, 1996). The WAIS-IV consists of 15 subtests which are used to assess four distinct components of intelligence, namely verbal comprehension, perceptual reasoning, working memory, and processing speed. The CANTAB is a measure of executive function and includes tests of visual memory, attention, and working memory. A number of comprehensive texts that review an inventory of neuropsychological assessments have been published (Strauss, Sherman, & Spreen, 2006).

Many cognitive measures share similar task parameters, so it is generally accepted that cognitive tasks lack process purity. Rather than tapping into singularly distinct cognitive constructs, they draw upon a number of cognitive processes. To address this, investigations of cognitive function often apply factor analytic approaches to define latent variables which reflect shared characteristics from multiple measures. It has also been recommended that researchers investigating the roles of specific cognitive processes use measures obtained by different tasks with minimal overlap (Salthouse, Toth, Hancock, & Woodard, 1997). Finally, it is also important to be aware of differential item functioning (also known as measurement bias) when measuring cognition. For example, when assessing performance on a cognitive task, it is important to consider a person's level of education, gender, or ethnicity as this may bias results.

Cognitive function has been associated with number of health, lifestyle, and sociodemographic factors. Higher levels of education and an engaged lifestyle characterized by socially, physically, and cognitively stimulating activities have been hypothesized to establish cognitive reserve, which has a buffering effect that protects against age-related cognitive decline and minimizes the impacts of neuropathology associated with neurodegenerative disorders like Alzheimer's disease (Stern, 2009). Biological mechanisms of neurogenesis and synaptogenesis underlie the capacity to develop new cortical circuitry in response to changing environmental demands; this is known as neural or cognitive plasticity (Greenwood, 2007). The recognition that plasticity occurs throughout adulthood and the cognitive reserve hypothesis have been a catalyst for a burgeoning interest in the utility of brain training.

Cognitive functioning is generally not considered to be a strong determinate of quality of life; however, it is implicated in quality of life research in a number of ways. Firstly, cognitive functions, particularly meta-cognitive processes, are important components in the appraisal of a person's own quality of life (McKennell, 1978). Perceptions and attitudes of a person's own well-being require conscious awareness and judgment concerning the self. Interestingly,

dementia patients who lack insight into their own condition have been reported to have improved quality of life (Hurt, Banerjee, Tunnard, Whitehead, Tsolaki, Mecocci, Kloszewska, Soininen, Vellas & Lovestone, 2010). In cases where cognitive dysfunction prevents self-perception and understanding of personal circumstance, then assessment of quality of life is difficult and may rely on proxy reports from family, friends, or care providers. The reliability of assessment by proxy will be contingent on how well the proxy knows the subject.

Low levels of quality of life are often found in dementia patients. Although cognitive dysfunction, impaired memory, and loss of semantic knowledge are hallmarks of dementia, these aspects of dementia are not known to greatly influence quality of life. Rather, reduced quality of life in dementia patients has been more closely linked with behavioral and psychological symptoms of depression, agitation, and aggression (Banerjee, Samsi, Petrie, Alvir, Treglia, Schwam, & del Valle, 2009). On the basis of these findings, cognitive function has been argued to be unrelated to quality of life. A contrary conclusion was reached by Mitchell et al. (Mitchell, Kemp, Benito-León, & Reuber, 2010) in their review of studies that investigated quality of life in patients with acquired or degenerative brain disorders, excluding dementia. Conditions included in the review included stroke, epilepsy, traumatic brain injury, Huntington's disease, motor neuron disease, multiple sclerosis, and Parkinson's disease. Although depression and emotional distress were often reported to be stronger determinants of quality of life, the review found that deficits in attention, processing speed, and executive function did adversely impact quality of life. Mitchell et al. (2010) stress that losses in specific cognitive domains will impact on global functioning and quality of life in different ways. For example, impaired verbal abilities may lead to communication difficulties which hinder a person's ability to maintain social roles at desirable levels. Thus, while cognitive function is not a primary dimension of health-related quality of life, it could be considered as a secondary dimension that may be important in certain contexts (Naughton & Shumaker, 2003), particularly when impaired cognitive function has the potential to impact on primary quality of life domains.

Cross-References

- ▶ Alzheimer's Type Dementia
- ▶ Decision Making
- ▶ Dementia Quality of Life Instrument
- ▶ Learning
- ▶ Mild Cognitive Impairment
- ▶ Planning, an Overview
- ▶ Quality of Life

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Cognitive Maps

▶ Faceted Smallest Space Analysis (Faceted SSA; FSSA)

Cognitive Theory with Children

▶ Cognitive Behavior Therapy with Children

Cognitive Transactional Model of Stress

▶ Affluence, Stress, and Well-Being

Cognitive Versus Noncognitive Value Theories

▶ Value Theories

Cognitive, Mental, Intellectual, Psychical, Subjective Adjustment

▶ Psychosocial Adjustment (Includes Psychosocial Functioning and Well-Being)

Cognitive-Behavioral Sex Therapy

▶ Sex Therapy

Cohabitation Gap

▶ Marriage, Cohabitation, and Well-Being in 30 Countries

Coherence

▶ Harmony

Collaboration

▶ Community Participation

Collaborative Coping

▶ Collaborative Problem Solving, Crises, and Well-Being

Collaborative Problem Solving, Crises, and Well-Being

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Synonyms

Collaborative coping; Common dyadic coping; Communal coping; Cooperative problem solving

Definition

Collaborative problem solving or collaborative coping refers to two (or more) people working together as a unit to solve a problem or cope with a stressor. It is a direct and active form of dyadic coping, as both dyad members invest resources to gather and evaluate information, jointly discuss options, and work together in implementing strategies and solutions. The joint and equal nature of collaboration can be contrasted to forms where dyad members are overly engaged so that one person dominates the interaction. Collaboration can offer various benefits to individual and dyadic well-being, especially among people facing crises. However, such benefits depend on contextual and personal factors that affect the quality of the relationship among dyad members and how stressors are appraised.

Description

How people cope with ▶ stress or solve problems mostly has been studied from an individualistic perspective. Coping (in general and also in response to specific stressors like the diagnosis of an illness) is viewed as an individual's way of dealing with a problem or stressor that he or she has encountered. In contrast to this approach, dyadic coping models (cf. Berg & Upchurch, 2007; Revenson, Kayser, & Bodenmann, 2005) represent a systemic approach that emphasizes that individual coping is situated in a social context where others can be involved in coping efforts in various ways. The variety of potential forms of interacting with others when dealing with a problem mostly has been studied in dyads (e.g., married couple, a parent and child), but this research also can be extended to larger groups and communities (cf. Lyons, Mickelson, Sullivan, & Coyne, 1998). When dyadic coping is conceptualized along a continuum of involvement (from uninvolvement to overinvolvement), collaborative coping represents the most positively engaged form. The dyad pools resources and works together in gathering and evaluating information, identifying and discussing possible solutions to a problem, and figuring out and implementing a preferred solution. A relationship partner who collaborates thus is more involved than someone who provides emotional or instrumental support during individual problem solving but less involved than someone who acts in a controlling manner by providing unasked for advice, taking charge, or telling the other person what to do.

Conceptualization and Measurement of Collaborative Problem Solving/Coping

Research on collaborative coping or problem solving started during the late 1980s and early 1990s. It was inspired by the somewhat disparate literatures on individual stress and coping (and in particular Lazarus and Folkman's transactional stress model) and on individual and collaborative everyday problem solving (cf. Berg, Meegan, & Deviney, 1998; Berg & Upchurch, 2007; Meegan & Berg, 2002). The literature contains three approaches to dyadic coping that explicitly consider collaborative forms of coping.

Coyne and colleagues (e.g., Coyne & Smith, 1994) introduced the notion of relationship-focused coping in addition to problem-focused and emotion-focused coping. Among the three forms of relationship-focused coping that have been distinguished (i.e., active engagement, protective buffering, and overprotection), active engagement is the most positive form representing a collaborative approach to coping. Active engagement in dyadic coping has been assessed via self and partner reports in various studies, mostly with the Ways of Giving Support Questionnaire (WOGS; see, e.g., Hagedoorn et al., 2000; Schokker, Links, Luttik, & Hagedoorn, 2010).

Bodenmann's Systemic-Transactional Model (STM) of dyadic coping (see, e.g., Bodenmann in Revenson et al., 2005) also includes different individual and dyadic coping responses. Among these, common (or joint) dyadic coping means taking a team approach in which both partners work together to manage their shared stress and to maintain the quality of their relationship. Common dyadic coping has been measured in various studies with the Dyadic Coping Inventory (DCI; or

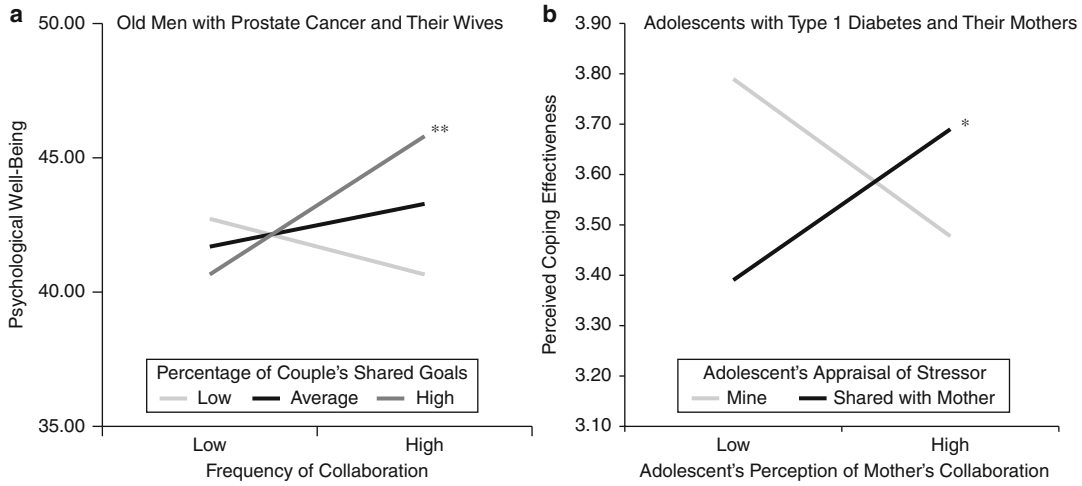
its forerunner, the Dyadic Coping Questionnaire [FDCT-N]; see, e.g., Badr, Carmack, Kashy, Cristofanilli, & Revenson, 2010; Bodenmann, Meuwly, Bradbury, Gmelch, & Ledermann, 2010; Bodenmann, Pihet, & Kayser, 2006).

The developmental-contextual model of coping (Berg & Upchurch, 2007; see also Berg et al., 1998) proposed by Berg and colleagues conceptualizes the process of how a dyad may together appraise and deal with a stressor or problem. Collaboration (as defined above) is one coping configuration that has been studied in addition to uninvolvement, support, and control. Collaborative involvement in problem solving has been assessed in various ways across a number of studies. These include interview and daily-diary measures assessing the proportion of collaborative coping strategies that were used when dealing with specific stressors that occurred during a day or week (e.g., Berg et al., 2008, 2009) as well as interaction coding for cooperative speech acts during problem-solving tasks that were completed together in the laboratory. In addition to determining the extent to which a dyad collaborated, Berg developed a questionnaire that assesses specific functions of collaboration. The Perceptions of Collaboration Questionnaire (PCQ; see, e.g., Berg, Schindler, Smith, Skinner, & Beveridge, 2011; Berg et al., 2008; Schindler, Berg, Butler, Fortenberry, & Wiebe, 2010) taps the frequency of collaborative coping in addition to the perceived benefits of collaboration for cognitive performance and relationship functioning. The cognitive compensation scale reflects the extent to which working together is perceived to help make up for one's own cognitive limitations. The interpersonal enjoyment scale measures to what extent working together is enjoyed because the relationship benefits from it.

Relations of Collaborative Problem Solving/Coping with Well-Being Indicators in Times of Crises: Moderating Factors

Extant studies of collaborative coping have been conducted with couples facing a "normal" range of everyday problems and stressors (e.g., Bodenmann et al., 2006, 2010), but mostly with samples experiencing particularly stressful life events or circumstances. These include couples or parent–child dyads coping with illnesses such as cancer, heart disease, diabetes, or ▶ asthma (e.g., Badr et al., 2010; Berg et al., 2008, 2009; Coyne & Smith, 1994; Hagedoorn et al., 2000; Schindler et al., 2010; Schokker et al., 2010) but also older adults in general who need to cope with typical age-associated functional impairments (e.g., Berg et al., 2011). As such stressful circumstances draw heavily on and may even exhaust an individual's resources for coping, pooling resources with a collaborator can be especially conducive to well-being in these situations. However, extant research has demonstrated that two heads are not always better than one. Rather, as highlighted by the developmental-contextual model of coping(Berg & Upchurch, 2007), collaborative coping is situated in developmental, social, and cultural contexts that influence when, for whom, and to what extent collaboration is related to various well-being or quality of life outcomes. The outcomes that have been studied comprise measures of individual as well as dyadic well-being (see Berg & Upchurch, 2007, for an overview). Measures assessing dyad members' ▶ quality of life have included indicators of ▶ subjective well-being, such as levels of positive and negative affect, depression, and ▶ anxiety (e.g., Berg et al., 2008), but sometimes also indicators of ▶ psychological well-being (Schindler et al., 2010). Dyadic well-being was studied with measures of relationship or ▶ marital quality, such as global measures of marital satisfaction and also more specific measures of how the dyad interacts (e.g., Badr et al., 2010; Berg et al., 2011; Bodenmann et al., 2006, 2010; Hagedoorn et al., 2000). In addition to typical well-being indicators, measures have tapped into coping effectiveness, for instance, determining how well a particular problem was solved or perceived efficacy or competence in dealing with an illness (e.g., Berg et al., 2009; Coyne & Smith, 1994). Studies on coping with illness further have included health outcomes.

Across different studies, collaborative coping typically emerged as the most adaptive and positive form of dyadic coping. It is most strongly and consistently related to ▶ relationship quality,



Collaborative Problem Solving, Crises, and Well-Being, Fig. 1 Interactions between collaboration and sharedness of goal/stressor in predicting quality of life outcomes. The interaction finding in panel (**a**) was taken from Schindler et al. (2010), the one in panel (**b**) from Berg et al. (2009); figures have been modified from the originals. Significance of simple slope: ** $p < .01$. * $p < .05$

and this association is reciprocal (cf. Berg & Upchurch, 2007). That is, collaboration is more likely to take place in satisfying relationships but is also a means to maintain and increase relationship quality (e.g., Badr et al., 2010; Bodenmann et al., 2006, 2010; Hagedoorn et al., 2000).

In contrast to relationship quality, associations of collaborative coping with other quality of life indicators have been less consistent, which has led researchers to search for ▶ moderators of the effects of collaboration. These moderators influence whether people believe that joining together to deal with a problem is necessary, expected, and beneficial. At present, interactive effects have been found in various studies, of which we can refer to only a select few. We organized these to reflect three broad classes of factors that influence effects of collaboration.

The first factor is whether the stressor or problem affects both dyad members. In many situations, this is quite obvious. For instance, a spouse's serious illness typically affects the other spouse as well. The same holds for the pursuit of shared goals, that is, both dyad members report having the same goal. In these circumstances, the dyad's appraisal of the stressor probably is more important than the "objective" situation. Collaboration is considered most beneficial when it occurs in response to stressors that the dyad members perceive as "ours" rather than "mine" or "hers/his" (Berg et al., 1998; Berg & Upchurch, 2007). Two examples of such interactive effects from our research are presented in Fig. 1. Panel A shows the interaction of frequency of collaboration (as measured with the PCQ) and the percentage of the couple's shared goals (measured in terms of possible future selves) in predicting the psychological well-being (Ryff's Scales) of older men with prostate cancer and their wives (Schindler et al., 2010). Frequent collaboration was related to greater psychological well-being of both husbands and wives only when the couple had many shared goals but not with an average or low percentage of shared goals. Similarly, panel B illustrates that adolescents with type 1 diabetes perceived collaborative involvement by their mothers in coping with everyday stressors to lead to more effective coping only when mothers shared the stressor (Berg et al., 2009). In contrast, if adolescents viewed stressors as theirs alone, mothers' collaboration was not significantly related to coping effectiveness. Together, these two studies demonstrate that collaboration is an asset in dyads who are or perceive to be interdependent in their problem solving. However, when dealing with own

problems or goals, collaborative involvement by close others is of little help and may even be perceived as a hindrance. In addition to such direct assessments of interdependence, collaboration has been found to be more beneficial among individuals with a more interdependent self-construal. For instance, women tend to view themselves as more interdependent with others and thus may expect greater collaboration and also gain more from collaboration than men when it takes place (Berg & Upchurch, 2007).

A second factor that influences the effectiveness of collaboration is whether collaboration is needed because of one or both dyad members' limited resources for coping or personal tendency to cope ineffectively. For instance, a study by Hagedoorn et al. (2000) with cancer patients and their spouses revealed that, while active engagement was generally related to better marital quality, this relationship was particularly strong among those most in need for collaboration. Specifically, active engagement was more strongly related to marital quality among patients with higher levels of depression as well as greater physical impairment resulting from cancer (especially for female patients). Along the same lines, a more recent study by Schokker et al. (2010) revealed that active engagement was particularly beneficial for patients (with diabetes, asthma, or heart disease) with a weak promotion focus, that is, those whose strivings were less oriented toward obtaining positive outcomes. Active engagement was associated with less psychological distress when promotion focus was weak, but unrelated to distress when promotion focus was high.

Nevertheless, there also are studies that do not support the conclusion that collaboration always is most beneficial to those who need it the most. Bodenmann et al. (2010) demonstrated that common dyadic coping reduces the effect of stress on verbal aggression toward one's spouse. However, this positive effect of common dyadic coping was limited to individuals experiencing low levels of stress. When stress was high, common dyadic coping did not offset the negative effect of stress on verbal aggression. Among couples coping with wives' metastatic ▶ breast cancer, Badr et al. (2010) found that common dyadic coping tended to reduce cancer-related distress only among patients' partners, but tended to increase distress among patients. This finding was interpreted in terms of these patients experiencing high levels of symptoms and distress and, thus, being overtaxed by working together and trying to help their spouse cope. Taken together, the role of resource or personal limitations in rendering collaborative coping more or less beneficial is complicated by the fact that such limitations may not only increase the need to be supported by a close other but also reduce one's ability to collaborate effectively.

Accordingly, a third factor that needs to be considered when evaluating the potential for collaborative gains is the dyad members' ability to collaborate and to contribute own resources to solve the problem. The Perceptions of Collaboration Questionnaire (PCQ) taps into this issue by assessing whether the dyad members perceive that working together fulfills important functions for them, namely, not only improves problem-solving performance but also helps maintain and increase relationship quality. Various factors influence whether dyad members are able to reap such collaborative benefits, among them the dyad's familiarity with each other, history of collaboration, and relationship quality (cf. Meegan & Berg, 2002). More temporary factors, such as overwhelming stress or strain in a particular situation, could also be considered here. Future research on well-being benefits of collaboration will have to disentangle at which time in the coping process collaboration is most helpful to which kind of person (cf. Berg & Upchurch, 2007). While collaborative problem solving represents a positive way for a dyad to deal with shared stressors and challenges, there are times when it may be necessary to first regulate one's own emotions and distress to enable subsequent productive engagement in working together.

Cross-References

▶ Active Coping
▶ Breast Cancer

- ▶ Coping with Diagnosis
- ▶ Marital Adjustment
- ▶ Marital Well-Being Measures
- ▶ Psychological Well-Being Inventory
- ▶ Social Support
- ▶ Stress
- ▶ Subjective Well-Being (SWB)

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Collaborative Research

- ▶ Action Research
- ▶ Community-Based Participatory Research

Collection of Research Findings on Subjective Enjoyment of Life

- ▶ World Database of Happiness

Collective "Self"

- ▶ Collective Identity

Collective Action

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Definition

In psychology, ▶ collective action is commonly defined as any action undertaken by an individual as a representative of the group and aimed at improving the conditions of the group as a whole (Wright, Taylor, & Moghaddam, 1990; also see Van Zomeren & Iyer, 2009). As such collective action typically aims at achieving some kind of ▶ social change. The social identity model of collective action (SIMCA; Van Zomeren, Postmes, & Spears, 2008) offers an encompassing psychological model that outlines different motivations for participation in collective action. The model offers a prominent role to individuals' social identity (i.e., that part of one's identity defined by membership in a social group), which is argued to underlie individuals' experience of group-based anger about the negative conditions of the group and their ▶ group efficacy beliefs to achieve a positive change in the group's conditions. In turn, all three variables uniquely predict collective action. Social identity is thus thought to affect collective action directly, but also indirectly via its influence on group-based anger and group efficacy. More recently, the SIMCA has been extended to include *moral* motivations to participate in collective action. Specifically, the model predicts that violated moral convictions increase collective action through increasing the model's three original predictors of collective action (Van Zomeren, Postmes, & Spears, 2012; Van Zomeren, Postmes, Spears, & Bettache, 2011).

Description

The 2011 "Arab Spring" provides a recent illustration of the power of mass protests to enforce social change. Such developments show that individuals, at least under particular conditions, together have the ▶ agency to change the social structure through participating in collective action. Historically, theoretical analyses of collective action departed from very different assumptions, including the irrationality of the masses (LeBon, 1896) and the rationality of the individual (Olson, 1968). In particular since the 1980s, however, the psychological collective action literature dropped these assumptions and explored a broad range of plausible predictors of collective action (Klandermans, 1984; Simon et al., 1998; Van Zomeren et al., 2008). This has produced an emerging consensus in the field that a proper psychology of collective action incorporates a variety of motivations (Klandermans, 1997; Klandermans, Van der Toorn & Van Stekelenburg, 2008; Van Stekelenburg, Klandermans, & Van Dijk, 2009; Van Zomeren et al., 2008; Van Zomeren & Spears, 2009). These motivations include the "rational" and individualistic motivation of *homo economicus*, the social identity motivation of *homo collectivus*, and the emotional motivation of *homo emotionalis*. More recently, the moral motivations of *homo moralis* has also been considered in conjunction with the other three motivations. Taken together, this set of motivations for collective action paints a multifaceted picture of human motivation in the context of collective action.

The SIMCA incorporates all four motivations for collective action (Van Zomeren et al., 2008, 2011; 2012). The center of the model is reserved for individuals' subjective sense of their social identity. A stronger sense of social identity predicts collective action directly because it translates the group norms about acting for the group into participation in collective action. Moreover, it is through a stronger sense of "us" that the other variables in the model predict collective action. First, individuals' perception of group-based unfairness and in particular the experience of group-based anger about it predict collective action. Because unfairness and anger are based in a sense of social identity, it makes them group based. Second, a stronger sense of social identity

fosters group efficacy beliefs that predict collective action. This is because, as a group, individuals can feel stronger and thus believe to be more efficacious as a group in achieving social change. Finally, SIMCA more recently included moral motivation in the specific form of violated moral convictions (subjectively strong and absolute stances on moralized issues; Skitka, Bauman, & Mullen, 2005). Specifically, the extended SIMCA predicts that when individuals' moral convictions are violated, individuals identify more strongly with the group that normatively fits their convictions. Through this stronger sense of "us," the model's original three motivations are also increased and thus participation in collective action becomes more likely.

The SIMCA reflects a theoretical synthesis of the literature because all four motivations described in it derive from different theoretical backgrounds. The *homo economicus* reflects the motivation of rational actors to decide upon action on the basis of cost-benefit calculation (Olson, 1968; Klandermans, 1984; Simon et al., 1998). The motivation of *homo collectivus* can be found in ▶ social identity theory (Tajfel & Turner, 1979; see also Turner et al., 1987; Simon et al., 1998), which suggests that individuals act to achieve, maintain, or protect their social identity. The motivation of *homo emotionalis* reflects the power of the (emotional) experience of injustice to motivate action as proposed by ▶ relative deprivation theory (Runciman, 1966; Walker & Smith, 2002). Finally, *homo moralis* reflects the idea that individuals become motivated to act when their moral standards are violated (Skitka, Bauman & Sargis, 2005).

The SIMCA has received a fair amount of empirical support. The original SIMCA was derived from a meta-analysis of primary research (Van Zomeren et al., 2008) and has been validated in correlational studies conducted in different countries (Cakal, Hewstone, Schwär, & Heath, 2011; Van Zomeren et al., 2011; 2012). Experimental research has supported some of the causal links that the model assumes (Miller, Cronin, Garcia, & Branscombe, 2009; Simon et al., 1998; Van Zomeren, Leach, & Spears, 2010). Furthermore, because the SIMCA originated from a meta-analysis of the literature that employed many studies with different populations, groups, and contexts, the model should be applicable across a broad range of contexts (Van Zomeren et al., 2008). Indeed, the addition of moral conviction to the model enables its explanation of participation in both more value-based and issue-based collective action (Van Stekelenburg et al., 2009). Moreover, it enables the explanation of collective action among the disadvantaged (Van Zomeren et al., 2012) as well as among the advantaged (Van Zomeren et al., 2011).

What does the SIMCA suggest with respect to the practice of mobilizing individuals for collective action? First and foremost of all, it suggests that organizers of collective action should acknowledge the multifaceted nature of prospective participants' motivation to engage in collective action. Rather than to focus on one particular motivation, the general recommendation is to try to speak to all four motivations described in the SIMCA. This means that mobilizing individuals for collective action will be more likely to succeed when organizers speak to the relevant social identity; evoke the emotion of anger about unfairness on behalf of the relevant group; are very clear about the group's efficacy to achieve its goals; and frame the situation, if possible, as a violation of moral standards that necessitates an active response. Although it is possible that some contexts will lean more heavily on one of these recommendations (Van Stekelenburg et al., 2009), I do not believe that organizers have to care deeply for the *minimal* conditions under which a mobilization attempt becomes effective – they simply need to aim for *maximal* impact.

I conclude by pointing out a potential misinterpretation of the psychology of collective action. That is, it does not imply in any way that collective action and social change are always "good" things. The psychology of collective action does not employ normative assumptions. Indeed, many historical examples suggest that "good" causes can easily become disasters for some or many. What the psychology of collective action does assume is that the same

psychological factors and processes that foster collective action are likely to be the same factors that impede it. Indeed, collective action seems unlikely when authorities manage to prevent individuals from forming social identities, to decrease hope among them for social change, to prevent them from experiencing group-based anger, and to portray the situation in nonmoral terms. As such, the psychology of collective action speaks to issues of social change as well as to issues of social stability.

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Collective Beliefs

► Community Values

Collective Conviction

► Ideology and Quality of Life

Collective Efficacy

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Synonyms

Group efficacy; Team efficacy

Definition

Collective efficacy is considered an extension of the self-efficacy construct, which is a submodel of the social cognitive theory proposed by Bandura. Perceived collective efficacy is defined as "a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments" (Bandura, 1997, p. 477). Within an organization, perceived collective efficacy represents the beliefs of group members concerning "the performance capability of a social system as a whole" (Bandura, 1997, p. 469). For example, in schools, perceived collective efficacy refers to the judgment of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students.

Zaccaro, Blair, Peterson, and Zazanis (1995) formulated another definition of collective efficacy as "a sense of collective competence shared among members when coordinating and integrating their resources as a concerted response to specific situational demands."

Bandura argued that collective efficacy is an emergent group-level property that reflects the group as a whole. This applies to different pursuits and sizes of collectivity.

Description

Bandura (1997) has argued that collective efficacy's sources and processes partially overlap those that affect self-efficacy. A group's judgment of its efficacy reflects the personal judgments of its members. Thus, self-efficacy of each member within a group is a main determinant of a group's collective efficacy at any level of the collectivity. Collective agency is exercised through group action in mastering tasks that require socially interdependent efforts to secure what cannot be accomplished by an individual.

Collective efficacy is a multidimensional element and is analyzed as a situational condition rather than a global characteristic of personality. Collective efficacy has been described as a consequential attribute of a group composed of individual perceptions. It is possible to differentiate between these two constructs without ignoring their close relationship and that both operate by means of similar processes where the social nature of the group determines the way in which they develop shared beliefs in a team.

Therefore, collective efficacy is not only the sum of the individual efficacy beliefs of the members of a team but is an emergent property at a group level. The perceived collective efficacy can have an influence on what the members decide to do as a group, on how to administer their resources, on the construction of goals and strategies, on their capability to persist when the collective efforts fail to produce results, or on the strength they demonstrate when confronting obstacles.

Individuals and groups interpret perceptions of efficacy in a similar way. They are influenced by their own direct experiences of success or failure, by social comparison or vicarious experience, by a persuasive influence, and by means of cognitive appreciation and psychological state. These sources of information are decisive at an individual level and equally as important for the development of efficacy beliefs at a group level. According to the sources of information theory, the most powerful is derived from the direct experience of success or failure while the least influential is transmitted via language.

Most of the research on collective efficacy examines relationships between group perceptions and aggregate group processes. For example, collective efficacy has been shown to relate to group cohesion and group cooperation and

communication. The camaraderie associated with elevated team confidence can also be expected to increase an individual's likelihood of engaging in interpersonal and performance management behavior.

Perhaps the most compelling reason for the recent development of interest in perceived collective efficacy is the probable link between collective efficacy beliefs and group goal attainment. Within education, several studies have documented a strong link between perceived collective efficacy and differences in student achievement among schools. Meta-analytic findings support a relationship between collective efficacy and performance (Gully, Incalcaterra, Joshi, & Beubien, 2002; Stajkovic, Lee, & Nyberg, 2009). Gully et al. (2002) calculated the collective efficacy to performance relationship as 0.41 and found support for the finding that collective efficacy is paramount in situations where the task requires high group interdependence. In a second study, task interdependence was found to moderate the collective efficacy to group performance relationship such that where tasks require high (as compared to low) member coordination, collective efficacy is increasingly important (Stajkovic et al., 2009).

The literature suggests that collective efficacy influences organizational commitment and job satisfaction. This is because individuals who are confident in their organization's capabilities to perform productively (i.e., collective efficacy) are more likely to appreciate their membership, to feel committed to their organization, and be more satisfied with the job characteristics. Collective efficacy predicts group aspirations and motivational investment in undertakings and performance accomplishments.

Clinical and community studies showed the relation between collective efficacy and mental health. There are relations between neighborhood collective efficacy and depression generally, and these relations are strongest in older adults and children. Ahern and Galea (2011) found that higher levels of neighborhood collective efficacy were associated with lower prevalences of major depression among older adults. Several pathways through which collective efficacy could affect depression have been hypothesized. Neighborhoods that are more cohesive and that exert more social control may provide more social support to residents, reduce the actual number of or perceived potential for stressful events, and potentially buffer the effects of stressful events when they occur. There may be more diffusion of knowledge in high collective efficacy neighborhoods, leading residents to have better health behaviors and health, which in turn could affect depression symptoms. Facilitation of collective action in high collective efficacy communities could improve local services and amenities, and such improvements may affect behaviors as well as mental and physical health.

Collective efficacy may also have both a mediator and a moderator role. In organizations, team efficacy mediates the relationship between leadership and performance. Prati, Pietrantoni, and Cicognani (2011) found that collective efficacy acts as a mediator of the relationship between stress appraisal and both burnout and compassion satisfaction. Stress appraisal reduced collective efficacy, which ultimately increased burnout and reduced compassion satisfaction.

Other studies suggest that a collective efficacy as a moderator influences the relationship between individual traits and individual behavior. Collective efficacy crosses levels to influence the relationship between two individual-level phenomena, personality and teamwork behavior. Stated differently, they suggest that group confidence may play a role in eliciting or suppressing the behavioral manifestation of individual personality characteristics (Tasa, Sears, & Schat, 2011).

Cross-References

- ▶ Collective Action
- ▶ Self-efficacy

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Collective Identification

► Collective Identity

Collective Identity

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Synonyms

Collective identification; Collective "self"

Definition

Collective identity is a sociocultural construction that, according to Tajfel (1984), has three characteristics: the perception the subject has of his or her belonging to the group (cognitive component), the consciousness that this belonging is qualified in a positive or negative way (value component), and a certain affection derived from the consciousness of this belonging (affective component). The configuration/reconfiguration of a collective memory, parallel to the biographical memory (the individual biography), can be added to these (Giménez, 1997).

The identity is intersubjective and relational; it is generated in the subjects' daily social interactions which delimit, through them, which are his or her own in contrast to those which are "different" (belonging to another) (Giménez, 1997). Collective identity is made perceived group belonging and the autoascription of subjects to the group. There are two levels of belonging: one of ascription (in which the subjects include themselves in the group in the simpler way knowing only the stereotypes generated by the group) and an identification one (in which the subjects know the cultural elements of the group; they appropriate at least a part of them and build from there their sense of belonging – identity by consciousness) (Giménez, 1997; Pollini, 1990).

Description

The identity implies not only that the subjects feel different from others but also that they are recognized as such by others (heteroascription), because collective identity means similarity toward the inside and difference to the outside, with a need of social recognition for its social and public existence (Giménez, 1997; Melucci, 1985). What subjects are depends on the social context, practices, conceptual resources and the interpretation according to which they see themselves and are seen by others (Castells, 2000; Giddens, 1995; Olivé, 1999).

The identity is not essential, static, and immutable but a complex social process that comes into existence and is verified through interaction, which means that it is in the interrecognition of the relations where the different personal identities, delineated by a specific social structure, become consensual (Piqueras Infante, 1996).

In the context of the relationship between culture and identity, what identifies a community is not the objective traits but the ones each member chooses with his or her subjectivity. Pérez Agote (1986) points out that even some biological traits (as race) are social. That is why it is not enough to

belong to a group to become identified with it (Giménez, 1997). The cultural elements constitute the specific characteristics of the group, the so-called identity references (ethnohistory, material products, values, collective practice, etc.). Thus, identity is an effect of culture and a condition since the apprehension of culture generates the possibility of its reproduction and change.

In modern society, there is rational cognitive socialization rather than an emotional one, and for this reason, the mechanisms for transmission of norms, values, beliefs, etc., have modified, not being the tradition but the communicative interaction that allows the subjects to integrate themselves to the "collective self." Belonging to various groups implies that subjects made a selection from the characteristic cultural elements of those groups, with which they define themselves, explain reality, and guide their way of acting. Identity implies a process of construction of sense considering an attribute or a group of cultural attributes, seen as prior to the other sources of sense (Castells, 2000). Simmel claimed that a positive correlation between the individual development of identity and the extension of the circles of belonging individuals has to be postulated (Pollini, 1990).

The choice made by the subjects of cultural attributes is influenced by factors such as the knowledge they have of their culture, the way it is transmitted, who and why it is transmitted, and the role subjects have in their group, their needs, aspirations, and interests, the diversity of the groups to which they belong, and the social context of them.

The identification with a group needs a social relations network by which the subjects take possession of the cultural symbolic system where the requirements of being part of the group can be found, recognize themselves, and be recognized as part of the group. Mercado Maldonado and Hernández Oliva (2010) said there is collective identity when the subjects of a group look at each other as similar, and they generate an inside collective definition.

Thus, to the characteristics of distinctness and difference, we can add persistence and permanence in time of identity – viz., continuity in change – and the value assigned to it, regarding identity as the central value around which the individual organizes their relation with the environment and the other subjects (Giménez, 1997), linking identity with the need the subject has to give sense to the existence (Castells, 2000; Giddens, 1995).

Identity and values, norms, beliefs, conduct patterns, etc., imply specific ideas about what a "good life" is and what quality of life implies, in individual and group terms, considering objective as well as subjective elements.

Different studies focus on collective identities performed by subjects and shown through conduct patterns, gender role constructions, values, expectations, etc., that made them consider and identify themselves as part of a specific group while they are recognized like that by the others. Ryan and Deci (2001) said that the definition of well-being raises cultural questions about the meaning and equivalence of constructs and pointed out the development of strategies about that. They also mention that Christopher (1999) pointed out that the notions of well-being are culturally rooted and that there are not a value-free assessment of well-being.

Holt-Jensen (2000) examined the quality of life of depressed areas in eight European countries and showed the importance that identity and space have in terms of "life significance" and self-value related to belonging. He shows that housing initiatives and neighborhood practices seem to be key elements improving quality of life in deprived urban areas.

Manzo (2005) looked into the relation of people and space in terms of well-being, attachment, and self-esteem, distinctiveness, and continuity of their lives.

Diener and Diener (1995) found variation between nations concerning the strength of association of subjective well-being to satisfaction with friends, wealth, and family.

Utsey et al. (2007) examined the antecedent factors that affect the quality of life of African Americans and proposed a theoretical model that identified the effects of culture-coping and spiritual well-being as predictors of quality of life. Results showed that spiritual well-being partially mediated the effects of culture-specific coping on quality of life.

Greenfield and Marks (2007) studied having 177 a closer identification as a member of one's religious group as a mechanism explaining the linkages between more frequent formal religious participation and better subjective psycho-logical well-being, based on data from more than 3,000 respondents, between 25 and 183 74 years, in the 1995 National Survey of Midlife 184 in the USA. Results showed that religious social identity would mediate the associations between more frequent religious service attendance and all dimensions of subjective psychological well-being examined.

Collective identities are related to the subjectivity of the individual that constitutes them and from which belonging these subjects take sense. That subjectivity is fundamental in the determination of what the subjects consider "good," "a good life," what produces satisfaction, well-being, and enjoyment in them, and all these considerations have more than one dimension.

There are similarities in the appreciation different groups have about quality of life as well as differences related to their specificity that make it necessary to explore the cultural meanings of different elements related to quality of life.

Cross-References

- ▶ Collective Action
- ▶ Community Cohesion
- ▶ Cultural Diversity
- ▶ Collective Memory
- ▶ Collective Responsibility
- ▶ Community Satisfaction
- ▶ Community Values
- ▶ Measuring National Identity

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Collective Memory

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Synonyms

Public memory

Definition

Collective memory refers to complex social process in which a society or social group constructs and reproduces its relation to the past. CM mainly refers to those cultural practices and social knowledge about the past that influence emergence, transformation, and extinction of social identities.

Description

Human collectivities, along with individuals, can possess memories of their own. Moreover, collective memories like those of nations, social groups, and families cannot be traced back to individual memories. They possess their own basic principles and dynamics that structure what individuals remember. As noted by one of the pioneers of the field, French sociologist Maurice Halbwachs, individual memories are always shaped by pregiven social frameworks; human faculty of recollection includes necessary reference to collective contexts (Halbwachs, 1992). On the other hand, collective memory always builds upon individual mnemonic capabilities. Although some radical "presentist" approaches argue to the contrary, in fact collective memories remain tied to individual experience and recollection.

CM is closely linked with history, i.e., with formalized and scientific description of the past. However, CM is in no way identical with the history in this sense. History pretends to be value neutral and coherent and is often hijacked by various elite groups; CM is much more diverse, closely linked with human values and morality, and often provides countermemories to the dominant historical discourse of society. If history is supposed to be grounded directly in the past, CM is much closer to the present. It serves as a reservoir and source for history writing. CM is embedded in social practices, and as such it is related with cultural, political, and economic dimensions of social life. CM is subjected to constant discussion and reformulation; it is reinforced by symbols, rituals, and commemorative practices; it is invested with power relations and instrumentalized for political purposes.

In social theory, there are two dominant approaches to collective memory. The first is the Durkheimian perspective. This approach treats the collective memory as resource of social integration in the present. For each and every human collectivity, there is a necessary reference to the past, which holds it together – either real or fictitious, as in the case of modern nations and their "invented traditions" (Hobsbawm & Ranger, 1983). Collective memory ties individuals together in a collectivity, and social integration of different groups depends to a large extent on shared memories and ritual practices. And, vice versa, diverging group memories in the same community often signal a conflict potential and lack of integration. For example, "mnemonic reconciliation" seems to be a significant precondition for effective democratization in postconflict societies (Abu-Nimer, 2001).

However, the integrative potential of CM often leads also to the struggle between different elite groups wanting to enforce different types of collectivities by means of manipulation of memories. These elites want to prioritize a particular type of collective ties at the expense of other collectivities. For example, references to collective memory are often made, when elite groups emphasize ethnic, class, or religious solidarities at the expense of other group solidarities. Thus, collective memory becomes a field of incessant formulation of, reformulation of, and struggle among different versions of collective memory, defended by different social groups.

The second approach to collective memory is provided by Freudian perspective. It sees memory as mainly unconscious source of tensions, discontents, and strains in society. They are often founded on collective traumas, e.g., wars, mass violence, or large-scale catastrophes. These events tend to produce discontinuities, ruptures, and identity crises influencing the present-day social life (Mitscherlich, 1975). According to this perspective, collective memory of a society consists of sedimentary, mainly negative experiences of the past that continue to work in present. Freudian concept of "the return

of the repressed" has been significant here: traumatic events excluded from public representations of collective memory tend to return in various ways, like collective aggression, xenophobia, authoritarian longings, or different psychosocial disorders.

Contemporary memory studies develop these approaches in order to comprehend the nature of social construction of memory. A lot of attention has been devoted to the role of power and politics in the shaping of CM. Relationship between the "dominant" and "countermemory" narratives are studied as well as those between the "popular" and "official" memories in different societies (Igarashi, 2000). Special attention is devoted to the role of collective practices that sustain different memory regimes in a society – like rituals, commemoration practices, and remembering the dead. Link between time and space seems to play a significant role in CM. Spatial location is often regarded as a significant counterpart of collective recollection. They interact in building of public monuments, ritualized commemorations, political anniversaries, etc. Most nations have their own sets of places, which play a role in its CM. The multivolume work of Pierre Nora *Lieux de memorie* has served as an inspiring example of this type of research (Nora, 1989). Modern states are often consciously involved in shaping of CM in various ways. Especially in Germany, there is a strong interest in interaction between political responses to regime changes (*politics of history*) and CM.

However, during the recent years the attention in CM research has shifted from nation state and its "official" public sphere to more private forms of collective recollection. Families, ethnic groups, and subcultures often have their own memory regimes, which are relatively stable and capable of autonomous development and interaction. Different mnemonic practices of different communities are studied – not only about how societies remember, but, more importantly, how they forget. All in all, in the rapidly changing world of today the constantly growing interest in CM signifies also a change in how the society formulates its relationship with time.

Cross-References

▶ Culture

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Collective Responsibility

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Synonyms

Corporate social responsibility; Group responsibility; Methodological individualism; Political responsibility; Social intentions; Social responsibility; Societal responsibility

Definition

The ascription to a group or organization of something to be done, of doing something, or of answering to something done (What a collective should do or what it has done and/or is answerable to).

Description

The concept of responsibility has been the subject of discussion, analysis, and debate

throughout the history of philosophy. Almost every important philosopher has discussed it in one way or another. In the latter half of the twentieth century, it became a major topic for many philosophers, including as the subject of numerous books. Most of this attention has been on the responsibility of an individual, with special concern for moral responsibility. There are broad connections of responsibility with moral principles, freedom of the will, and action theory.

With revelations of the Holocaust (see Hannah Arendt in May & Hoffman, 1991), of the horrors of world wars, and of moral turpitude in Vietnam (see French 1972, 1998) and Indochina came important, but difficult, questions about collective responsibility. For decades now, the idea of collective responsibility has become puzzling and troubling. In recent years, there have also been discussions about collective responsibility for problematic issues, for example, alcoholism, suicides, and human trafficking, and collective responsibility against terrorism, nuclear threats, and climate change. On another front, there has been a movement for corporations to adopt a model of corporate social responsibility.

Discussions of collective responsibility first focused on cataclysmic cases like genocide against aboriginal peoples in North America, the Armenian genocide, the Japanese massacre in Nanjing, the Holocaust perpetrated by the Nazis, and the My Lai massacre by US soldiers, for which nations, governments, and armies have been held collectively responsible. Cases of corporate responsibility for major disasters were also discussed, such as that of Union Carbide in the Bhopal (India) gas leak and of the Exxon Valdez oil spill. The tragedies perpetrated were of course major assaults on the quality of life for individual and collective victims. Furthermore, the charge of collective responsibility was a way of recognizing the evil and harm done, while the later call for apologies and restitutions affect the ▶ quality of life of survivors and the descendants of the victims. Feelings of being wronged on one side and of guilt on the other are certainly part of what must be responded to in maintaining a satisfactory quality of life. Many have seen the establishment of truth and reconciliation commissions as a way of attending to the feelings and relations, individual and collective, that make up a good quality of life, although debates continue about a discord between reconciliation and ▶ justice. Important issues about quality of life clearly arise from considerations of collective responsibility.

In philosophy, there was significant early work on group and corporate morality (e.g., French, 1984; May, 1987). Soon after, philosophical work developed on the basic nature (or "ontology") of collectives, groups, and societies (see Gilbert, 1989; Tuomela, 1995) and on the nature of shared or group intentions. From early on, the philosophical debates about collective responsibility have been encouraged and supported by literature in the social sciences. Philosophical discussions in the area continue unabated with little agreement and much dissension. (For a recent representative collection on collective responsibility, see French & Wettstein, 2006). Collective responsibility is itself complex with diverse applications, but understanding it is important to a variety of concerns.

Forms of Being Responsible and of Responsibility

Feinberg says that when "we state that a person is responsible for some harm, we sometimes mean to ascribe to him *liability* to certain responsive attitudes, judgments, or actions" (Joel Feinberg, "*Collective Responsibility*" (1968, in French, 1998, p, 51)). This is a characterization of what is frequently said of moral responsibility. However, it should be noted that the words "responsible" and "responsibility" also have more general uses.

In the most general terms, causal agents of all sorts are responsible for their effects. Cold fronts are responsible for bad weather, and an earthquake can be responsible for a rooster crowing. An alarm clock can be responsible for one's waking up just as a rooster can be and so can the staff at the hotel front desk or the hotel's automated messaging system. People, but not things, are given responsibilities

for doing things (e.g., phoning or maintaining the message system) and are consequently responsible, in another sense, for doing them even before they are done. People, but not cold fronts, have responsibilities, but not all of them are moral responsibilities. There are service responsibilities, for example, to keep records; civic responsibilities, for example, to keep informed or to complain; citizens' responsibilities, for example, to vote; and moral responsibilities, for example, to help the injured and to reimburse someone for a loss at one's hands.

Moral responsibility, which has got most of the attention, does of course apply to people and is usually reserved for cases of harm done or losses incurred that need to be rectified. This is being responsible after the fact. (Gilbert, in French and Wettstein 2006, pp. 94f, calls a requirement of paying for a loss a backward-looking responsibility, to do something because of what one has done, as opposed to a forward-looking responsibility, to see that future action is taken). One is responsible for causing harm and henceforth is morally responsible for the harm done and, consequently, susceptible to reprimand, punishment, and/or making amends. (Sometimes the responsibility is taken by a parent of a delinquent child or by a boss for an employee's accident). The action of harming is not a responsibility, but the obligation to respond is. Most of the discussions about being morally (individually and collectively) responsible are about harm done or disasters perpetrated rather than about any positive good promoted or other behavior deserving praise. People are held morally responsible for immoral irresponsibility.

There are three kinds of cases of an individual being responsible:

1. **Causal responsibility:** People – and other agents, human, or otherwise – are said to be responsible for what they cause, do, or maintain, although what has been done is not said to be a responsibility.
2. **Responsibility as task or obligation:** One can be responsible for things to be done, with the responsibilities being set out formally as in a constitution or informally by expectations or precedents, and may be of a personal, civil, or moral nature. People can take on responsibilities or be given them even unwillingly. One is responsible from the time the responsibility is taken on (or given) until the act is performed (by the agent or someone else) or one is released from it.
3. **Responsibility as moral obligation for one's transgression:** Finally, as a special case, agents can be responsible for making amends for something they have done. Moral agents who are responsible for immoral behavior are then morally responsible for apologizing or making amends, as an obligation. Moral responsibility in this sense, which is the focus of most discussions of collective responsibility, looks back to wrongs done, as the agent's fault, and looks forward to amends to be made. Surely, there also are independent moral responsibilities to behave in right and good ways.

Society and Responsibility

Each kind of case can be understood collectively and non-individually. People do things together and collectively, including in ways that make them morally responsible. Two or more people can carry a table and bash a wall. It is easy to see each responsible and all responsible collectively. They can be thanked, individually and collectively, for moving the table and blamed, individually and collectively, for damaging the wall. Mere collections of people can perform collections of acts, such as multiple gifts to a charity or overfishing a pond, thereby improving or worsening the quality of life. There is nothing uncommon about collective (moral) responsibility.

There are, of course, more portentous cases of collective responsibility, some of which have gotten most of the attention. In 1968, Lieutenant Calley and his "Charlie" company were held responsible for the massacre of hundreds of Vietnam women, infants, and other civilians in My Lai village. Apparently, virtually all soldiers in the company were responsible for murders and mayhem and, consequently, are held collectively (morally) responsible. Our intuitions about collective responsibility seem clear here about each individual being responsible for the

atrocity. It was several decades later before Chief Warrant Officer Hugh Thompson was decorated and honored, belatedly, for confronting his company and saving the lives of many other villagers. He has said he feels some moral responsibility for civilian deaths, but he also felt it was his responsibility to confront the massacre in process. In his view, stopping the massacre was a moral responsibility.

The My Lai massacre was awful, but there is little question about the nature of responsibility and even about the apportionment of blame to the individuals involved. Questions begin to arise, however, about the context and about the US invasion of Vietnam. Is there a collective responsibility for sending people to war in the first place and the killing and destruction that ensued?

This parallels the question that arose a couple of decades earlier about the Nazi German pursuit of the Final Solution against Jews and non-Aryans, especially as carried out in the Holocaust. In the case of the Holocaust, the questions reach further and are more troubling about what happened but also troubling conceptually. Some are tempted to say that Germany as a whole, that is, the nation, was responsible. There were indeed thousands carrying out orders and administering the policy. And there were millions that apparently tolerated what happened, mostly in silence. It was the policy of a nation and its government. In 1947, Karl Jaspers claimed that all human beings, including all Germans, participate in a universal "metaphysical guilt," while Hannah Arendt wrote of Germans acting "as cogs in the mass-murder machine" (May & Hoffman, 1991, p. 279), as mere functionaries in a bureaucratic organization. Her hope was that people would act out of "fear of the inescapable guilt of the human race" (May & Hoffman, 1991, p. 283).

Two contrary, but troubling, positions arise from the claim that a whole nation is collectively responsible. One position, taking an individualist perspective, is that every individual in the nation, as a national, is held responsible for the tragedy or crime. This seems extreme and unfair for its lack of discrimination about the responsibility, as though everyone is responsible, although to a different degree, along with Hitler. Despite attempts at explanatory and justificatory accounts about citizens' consent or culpable silence or, in an active role, about solidarity or shared intentions with diminished responsibility, most think it is ultimately unsatisfactory to attribute individual responsibility universally in such a national crime.

A second position claims that the collective as a whole, the nation (and maybe a few leaders), is responsible and consequently not the individual members of the collective. This position is troubling for attributing responsibility only to the nation as a whole, as a single collective. On this view, individuals are absolved from responsibility (except perhaps Hitler and a few other leaders). Another position, discussed below, is that responsibility should be attributed to many individuals as well as the whole nation. The overarching trouble, according to many social theorists, is that there is no such thing as a nation, a society as a whole, to be responsible.

Here begins a morass of problems that lead to the view that "'[c]ollective guilt' is a nasty phrase" (Bar-on in May & Hoffman, 1991, p. 255). As French writes, the "idea of collective . . . responsibility has been frequently and loudly decried as a vulgarism" (French, 1998, p. 33). French has confronted the confusions by arguing that corporations are moral persons with social responsibilities and that there are other collectives to which responsibility can be attributed (see French 1984, 1998). Questions persist and debates rage about whether there (really) are collectives and how they relate to individuals – through reduction, eliminable or otherwise; through composition, via solidarity or shared intentions; or through some sort of independence. The positions that are taken on these questions affect what is said about collective responsibility, moral, and otherwise.

Bringing in Collectives

The concerns about collective responsibility arise when collectives or social groups of various kinds are said to be collectively responsible as a whole. The response of "agency individualists" is that there are no collectives – all collectives, societies, and other groups can be reduced to the individuals that constitute them, with the

consequence that there are no collectives to be responsible. According to agency individualism, the only sense in which an organization, corporation, nation, or other collective can be responsible is through the acts of constituent persons or at least some responsible executive officers or leaders.

"Methodological individualism" in the social sciences claims that only individuals do things, and thus only individuals are responsible for what happens. A group of individuals can act collectively in unison, like a chorus line of dancers. Each and every individual is responsible for doing the same thing, which may be something in aggregate. If each member of Charlie company killed a civilian in My Lai, then the company is morally and collectively responsible – but only because of individual responsibility, to which the collective responsibility is reduced. For the agency individualist, only individual persons, not collectives, have the requisite intentions, consciousness, and will to be moral agents. A collective cannot be an agent of any kind and certainly not a responsible (moral) agent. "The political will" of a nation is only a figure of speech.

There is the danger that if the collective were held responsible as a whole, many individuals in the collective would be wrongly held to account even though there was nothing that they did, nothing wrong, even nothing at all. Not all Americans in the nineteenth century were slaveholders, and those who were not should not be held accountable for the human cruelty and devastation of lives. Not even their silence is sufficient to hold the nonparticipants at the time responsible.

Some may think that the moral responsibility of the nation for the evils of slavery remains in the twentieth and twenty-first centuries, but few would think that contemporary Americans should be charged with moral responsibility for the commission of those evils. However, contemporary Americans can have a different moral responsibility, even through reparations, to help other citizens who have been somehow disadvantaged. They will then be morally obligated, but not *because* of what they did or even their country did. This is parallel to the case of parents being responsible for what their child has done.

Moreover, there are also responsibilities other than moral responsibilities. Individuals have general duties, or responsibilities, as citizens, but also as *friends*, *neighbors*, or nationals without being charged with any moral failings. There are even mundane responsibilities of cleaning up one's messes or apologizing when one disturbs the peace. Individuals have a variety of different responsibilities but so do collectives, groups, organizations, and nations.

For collective responsibility, one needs to distinguish between responsibility of individual people doing something collectively and a collective, including organizations, doing something. The members of a chorus line dance collectively, each dancing. All the dancers can be bad and share in the responsibility collectively, but the dance troupe as a whole is collectively irresponsible if they do not dance together.

There is much that happens that is difficult, and some think impossible, to understand as the sum of a collection of individual actions. Constant complex activity in society happens because of groups and movements and other collections of individuals but also because of organizations, associations, parties, corporations, NGOs, nations, and international organizations, to name some. Hundreds of thousands of individual drivers constantly contribute to, and are responsible for, pollution in a city, while a car company, as an organized collective, creates, and is responsible for, pollution from its factory smokestacks and the inferior fuel systems in all of its cars (This useful comparative example comes from Mathiesen in French and Wettstein (2006, pp. 240f)).

A food processing company is a collective actor that can risk infection of its products. The board of directors acts as a collective in deliberating and deciding what the corporation should do and what risks can be taken. A government inspection agency may share some responsibility for not stopping the risk taking. Employees may have no responsibility at all, even though they are part of the company. To take another example, a sales team may be responsible as a collective for a drop in sales for

various reasons. It could be because the team is made up of excellent salespeople who are sent to the wrong places by a deficient sales manager. Or a good sales manager may be handicapped by all or most of the salespeople being inept. Only in some cases is the collective irresponsibility the result of (most of or all) the people being collectively irresponsible.

Corporations, and other organized collectives do things, plan, and decide, and know and conceal things. What they decide and do clearly can be assessed and praised or criticized. It is thus reasonable to speak of corporate social responsibility, corporate responsibility to shareholders, and corporate responsibility for pollution and other problems. French (1984) thinks that corporations have internal organizations and decision procedures that justify their being considered persons with responsibilities, moral, and otherwise. Bratman (1999) argues for a planning theory of intention and agency that applies to corporations, and other collectives, as well as individuals. That corporations do not have conscious phenomenal experiences is not a problem, although some may think so. Bratman and others have also argued that there are shared intentions that support the idea of there being collectives that are responsible. Pettit (and others) also argue for group agency over and beyond individual agency (List & Pettit, 2011; Pettit, 1996). These ideas are still being developed – and contested – by many.

One could start from intuitive ideas about what corporations do. So much of social activity involves organizations, for example, corporations, governments, churches, and departments, rather than simple (random) aggregations of individuals. Even groups of individuals are usually grouped or organized into teams, brigades, casts, committees, etc., which act as collectives. Since corporations are held to be criminally liable and national apologies are demanded for what nations have done, it is intuitively plausible that corporations, and nations and other organizations, are responsible agents in the requisite ways, allowing collective responsibility to be understood in a way parallel to individual responsibility, but where the responsibility is attributed to collectives rather than individuals. This is an intuitively plausible social ontology. (See Copp on "the intuitive argument" in French and Wettstein (2006) and on "collective moral autonomy" in the *Journal of Social Philosophy*).

This reintroduces the question of understanding, and explaining, collectives. If a collective (or group or organization) is thought of as real and recognized as doing things, then ideas about collective responsibility fall into place. Moreover, unrealistic attempts to reduce complex corporate, national, and global organizational activities to what the individuals were doing are avoided. What would be even more recherché, reductions of corporate responsibility to individual responsibilities are also avoided. Of course, with collective activities there are virtually always complex individual activities to explore, criticize, and praise; but one can, and should, always consider directly what the organized collectives have done. (On why one can and *should* look at both levels, see Isaacs, 2011).

Corporate social responsibility is standardly about what corporations should do in a quasi-moral sense. A corporation has collective responsibility to its shareholders but also to the community in which it is based and/or active. Corporations deliberate, plan, and act to bring about – be responsible – for much that happens in society. It may be unclear just what the "best practices" are, but it will also be unclear what the boundaries of the moral are. It is sufficient that corporate (and other) collectives can be held responsible for what they do and acted upon by shareholder (or member) pressure, community criticism, and legal action to make amends. Despite these intuitive points, some maintain that corporations are limited in the responsibilities that they have, even to the single goal of shareholder profit. (For discussion, see Silver, 2005).

Blame, Punishment, Duties, and Beyond

Even granting that collectives, like corporations and nations, can be collectively responsible, two questions arise. What happens to individual responsibility when there is collective

responsibility, and how can collectives be punished and with what results to individuals?

A common concern is that when a collective is responsible and punished, individuals that are associated with it will also be held responsible and punished, even when they are completely innocent. Nothing follows from a collective being responsible about associated individual responsibility, but this does not mean that there is no individual responsibility for individual actions wherever there is collective responsibility for collective actions. Some have proposed cases where there is collective responsibility without *any* individual responsibility (see Pettit and also Copp in French and Wettstein and in the *Journal of Social Philosophy*, with criticisms), although there is almost always individual responsibility as well (See the discussion of this issue in Isaacs, 2011). There is the opposite concern that guilty individuals sometimes avoid responsibility when the corporation is held responsible. (In the case of the Bhopal gas leak from which "tens of thousands died," it is reported that eight executives were convicted, but "none has yet served time" *Globe and Mail*, December 3, 2012, p. A2).

Whoever and whatever is responsible depends always on who and what does something. That someone does something is not negated by someone else, or by some collective, also doing it. An orchestra can play beautifully when some instrumentalists, but not all, do. A university can cultivate a creative student as can some of its best professors. Often what the collective is responsible for is different but related to what individual members do. In the United States, Congress is responsible for declaring war, but not the Congressional representatives, who can be praised or blamed for voting or speaking up one way or another. There are formal rules about majorities but not about persuading Congress. There are no formulae based on individual actions for determining whether and how collectives are responsible. In the case of war, there are individual and collective responsibilities that combine to determine what the country does. Silence, for example, is a collective responsibility where individuals should have spoken out; unions should have taken a stand; the media should have published material; and corporations should have acted.

It is important also to note that not all duties or tasks are moral obligations. There are many responsibilities, beyond criminal liability and moral responsibility, which apply equally to collectives and individuals, and thus collectives – like individuals – can be responsible for civic tasks, social activities, and global actions. In fact, that is the significance and apparent reason for promoting corporate social responsibility, which improves the image of corporations, and perhaps advances some of their civic work. There is no reason corporations and other collectives cannot be responsible in many ways, including morally, both negatively and positively, despite arguments to the contrary that their only responsibility is to make a profit.

Once one holds organizations and corporations as wholes collectively responsible, there is the difficult question of how they can and/or should be punished. Unlike individual punishment for individual responsibility, society cannot use house arrest, imprisonment, or the death penalty. Nor do shame and humiliation have any traction. Collectives are different, but not all that different. Organizations and corporations can be taxed, forced to pay reparations, and perform community service. Because they are different, they can also be dealt with in different ways that are appropriate to their collective nature. Corporations can be regulated in a variety of ways and restrained financially. There are also a variety of ways that they can be forced to make their records and activities public. For other collectives like nations, there can be restrictions in treaty relations and/or economic sanctions.

It is appropriate to try to avoid individual suffering when the collective is punished, but those connected with the miscreant may suffer misfortune, just as a family suffers from the arrest of a parent and breadwinner. Shareholders and employees will suffer from losses of a firm whether it be by criminal charges, bad decisions, or market changes. Citizens under a dictatorial government may call for a boycott

of their country and endure the consequent suffering in order to bring down the repressive regime. The boycott, which serves as a punishment of the government, may be "punishing" but not a punishment of the citizens. Most of the questions here seem practical rather than conceptual.

Over half a century ago, discussions of responsibility focused on individuals and then branched out to collectives and whole societies, usually centered on moral failings and then large-scale social evils. Eventually, corporations were included in charges of moral turpitude. However, in the attempt to understand collective and organizational responsibility, these studies were connected with philosophical debates about the nature of groups and with practical movements of positive social and collective behavior. Numerous philosophical studies with analyses of group and social intentions have developed with the attempt to understand the nature of society and social action. All of this broadens the reach of our understanding of collective responsibility and, consequently, the quality of life for individuals and collectives. For example, it gives sense to considering the daily travesty of poverty and homelessness in the world and in our own countries as something for which society is collectively responsible.

Social theorists can now investigate what Bratman calls the "dynamics of sociality," which goes far beyond earlier discussions of collective responsibility, allowing us to look at group and social agency, public goods, and collective visions. The discussions connect with what can be said about deliberative ▶ democracy and social agency in many forms and, thereby, develop a strong foundation for a better quality of life, both for individuals and collectives.

Cross-References

- ▶ Collective Action
- ▶ Collective Efficacy
- ▶ Morality and Well-Being
- ▶ Moral Theories

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Collective Self

► Independent/Interdependent Self

Collective Urban Practices

► Sharing Space in the Contemporary City

Collective Will

► General Will

Collectivism

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Synonyms

Exclusionism

Description

More than a decade ago, Smith, Dugan and Trompenaars (1996) stated that the individualism-collectivism dimension was "the most important yield of cross-cultural psychology to date" (p. 237). Since 1980, this construct has become extremely popular in the cross-cultural literature, and at least 1,400 articles have been published on the subject (Gelfand, Bhawuk, Nishii, & Bechtold, 2004). However, their authors have applied the term individualism-collectivism to a wide range of diverse phenomena, creating significant confusion.

The fascination with the individualism-collectivism dimension started after Hofstede's (1980) work. He used nations as units of analysis and proposed a bipolar dimension of national culture that was strongly correlated with national wealth. The rich nations emerged at one of the dimension's poles (individualism), whereas the poorest nations were at the opposite pole (collectivism). Hofstede interpreted this dimension as a contrast between loose ties among individuals and strong group cohesion.

Hofstede's work was followed by attempts to measure individualism-collectivism across individuals rather than nations (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988; Triandis, Chen, & Chan, 1998; Triandis, Leung, Villareal, & Clack, 1985; Triandis et al., 1993, etc.). In order to avoid confusion between Hofstede's dimension of national culture and the individual-level measures, some authors have proposed that the latter should be given a different name, for instance, "idiocentrism versus allocentrism" (Triandis et al.). However, the terminology is not the only source of misunderstanding. The numerous individual-level analyses have produced a wide spectrum of diverse and uncorrelated dimensions, a review of which is available in Oyserman, Coon, and Kemmelmeier (2002). Most often, they reflect individual differences in concepts such as independence, interdependence, self-reliance, and ► competitiveness that are often statistically unrelated; therefore, it is illogical to bring them under one and the same heading, be it individualism-collectivism or idiocentrism versus allocentrism.

On the other hand, various large-scale studies at the national level have resulted in closely correlated dimensions of national culture that are associated with national wealth and hence with Hofstede's original. Nevertheless, they have been given different names – integration (Chinese Culture Connection, 1987), egalitarian commitment versus conservatism (Smith et al., 1996), individual-social (Smith, Trompenaars, & Dugan, 1995), uncertainty avoidance (Sully de Luque & Javidan, 2004), future orientation (Ashkanasy, Gupta, Mayfield, & Trevor-Roberts, 2004), exclusionism versus universalism (Minkov, 2011), etc. – reflecting different nuances or facets of one and the same nation-level dimension. Only Project GLOBE (Gelfand et al., 2004) retained

Hofstede's original name for one of their dimensions of national culture that is associated with national wealth.

Collectively, these nation-level studies have revealed that the main cultural difference between the developing and the rich nations is in the treatment of people: on the basis of their group affiliation (collectivism) or as individuals (individualism). The developing nations tend to maintain cohesive in-groups whose members share various types of privileged mutual treatment but often exclude out-group members from this circle and even discriminate against them: a phenomenon called "exclusionism" (Minkov, 2011). This results in nepotism, racism, sexism, and other forms of discrimination or intolerance, discriminatory application of the laws or lack of the rule of law as it is understood in Western societies, corruption, consumer fraud, and various forms of neglect of out-group members, such as poor planning and disregard for public safety (expressed, for instance, as higher road death tolls). In the rich nations, the boundaries between in-groups and out-groups are blurred and further disintegrating, and treatment of individuals on the basis of their group affiliation is strongly denounced: a phenomenon known as "universalism" (Minkov, 2011; Schwartz, 2007). Consequently, richer countries have less nepotism, sexism, racism, corruption, and consumer fraud, and greater concern for the interests of all members of society, better planning, stronger safety regulations, and lower road death tolls.

In view of these differences, it is not surprising that measures of individualism versus collectivism, universalism versus exclusionism, national wealth, and average national ▶ life satisfaction (as measured by the World Values Survey) are all highly correlated. Low life satisfaction may be due to an inability to cover basic material and safety needs. However, the low life satisfaction that characterizes most developing nations is partly associated with the aforementioned characteristics of their exclusionist societies and the various types of discrimination, neglect, disorganization, and lack of the rule of law that characterize them.

Cross-References

▶ Cross-Cultural Adaptation
▶ Cross-Cultural Comparison

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College Student Quality of Life and Social Capital

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Synonyms

Social cohesion and social capital among students; Social networks

Definition

Social capital refers to social participation (informal and formal) and trust (sense of belonging, willingness to be involved). In the context of college life, it has unique meanings combining personal quality of life, social ties within campus, and educational abilities together.

Description

Quality of life is an important aspect for strengthening capacity of learning among the students at the universities. In this text, quality of life will be seen from the viewpoint of social capital. The measurement of social capital was created according to the previous research and knowing the context of studying and learning at the universities. In the core of the social capital measurement, three key elements were defin1ed: confidence, involvement, and student's resources.

Background

Quality of life has been studied from different viewpoints and in different contexts, like measuring quality of college life (Sirgy, Grzeskowiak, & Rahtz, 2007), poverty (Kyo-seong Kim, Lee, & Lee, 2010), and social exclusion (Vuokila-Oikkonen & Kainulainen, 2010). In this entry, quality of life will be discussed from the viewpoint of social capital. Social capital was investigated among the students at some Universities of Applied Sciences (UAS) in Finland. The research relates to the project in which aim was to develop models for assessing and planning intervention actions to prevent social exclusion among students at the Universities of Applied Sciences in Finland. Fourteen UAS took part of this project. Social capital was seen as a resource. In developing the measure for social capital, we suggested that when increasing the social capital within campuses, it would lead increases in students' experiences on health and welfare and would help students graduate. Because social capital should be defined in the context in which it will be measured, we developed instrument for measuring social capital at the Universities of Applied Sciences.

Social Capital within Students

Social capital is a multidimensional concept, and it was mentioned first time in 1800s. However, more attention was paid in 1970s–1980s by scientists James Coleman and Pierre Bourdieu. Moreover, extensive attention was paid in the middle of 1990s by Robert Putnam. Putnam published the book Making Democracy Work with his colleagues in 1993. Social capital facilitates cooperation and mutually supportive relations in communities. According to Ching-Hsing (2008), social capital demonstrates intangible assets as confidence, networks, and social norms of reciprocity, possessed by a society within a specific culture. When a human or a family increases its sense of community or quality of community participation,

College Student Quality of Life and Social Capital, Table 1 Mean of the components of student's social capital

	Social capital	Trust		Participation		Support	
Mean	3.9534	3.9457		3.6397		4.2718	
Std. deviation	.52250	.60523		.82773		.65398	
Items		Teachers	4.06	Well-being	4.60	Other students	3.98
		Students	4.23	Economy	3.96	Studentunion	3.80
		Instructors	4.14	Relations	4.62	Devel. teaching	3.19
		Counselor	3.91	Housing	4.39	Ownlearning	3.59
		Welfare support	3.33	Hobbies	4.11		
				Services	3.94		

this could increase its social capital. For promoting mental health, social capital seems to be important (McKenzie, 2008). However, when measuring social capital in the context of campuses, social capital can be conceptualized and measured from various perspectives. In our development, we focused on the individual as well as community perspective of social capital. At the individual level, we focused on students' resources used for supporting learning, such as mental health, relationships with network, and maintaining relations with the peers. At the community level, we focused on intercommunity relations at campuses, such as confidence and involvement. So the attributes were compounded as confidence, the involvement, and students' resources.

Reserves of Social Capital

The social capital measurement tool developed in the CDS project charts students' sense of trust, their opportunities of participation, and their resources. The first social capital measurement tool (I) contains questions (1–3) relating to the reserves of social capital. The tool was tested in the Diaconia University of Applied Sciences in spring 2010 and 2011 as well as in some other UAS.

In the Diaconia University of Applied Sciences (Diak), students take part of annual student survey once a year. Eight hundred sixty-two students (from about 2,500) involved the survey and evaluated the level of education as well as social capital in May 2011. Students represent reasonably well all the students of Diak: 9 of ten were female, mostly 21–25 years old (38 %), and half of them from first to third semesters.

All questions had options from 1 to 5: disagree completely, disagree somewhat, neutral (not disagree not agree), agree somewhat, and agree completely. First pattern (TRUST) had a question "In the university of applied sciences I attend, I have a relation of trust and good rapport with. . ." with following items to evaluate: the teachers, the students, the instructors at practical training places, the study counselor, and the persons supporting student welfare (pastor, psychologist, public health nurse counselor, etc.). Cronbach's alpha of trust (consist of five items) was .678. Mean of the trust was 3.9457 (StD .60523). Correlation of trust was higher with participation ($R = .448$) than with support ($R = .260$), both statistically significant.

The next pattern (SUPPORT) had an intro "The following issues support me as I progress in my studies" with following items: My own sense of psychological well-being, The economic situation, Personal relations, Working (earning), Housing, Hobbies, and Social and health services. Cronbach's alpha of Support (consist of five items) was .812 and mean 4.2718 (StD .65398). Correlation with Support and Participation was .293, statistically significant.

The third pattern (PARTICIPATION) had an intro like "In the environment in which I study, I can, if I wish" with the following items: Get comfortably together with other students, Participate in student union activities, Take part in developing the teaching, and Plan my own learning. Cronbach's alpha of Participation (consist of four items) was .780 and mean 3.96397 (StD .82773) (Table 1).

Cross-References

- ▶ Cultural Capital
- ▶ Financial Capital
- ▶ Gifted American College Students, Application of the Personal Well-being Index (PWI) (Adult Version)
- ▶ Happiness and Social Capital
- ▶ Higher Education: Human and Social Capital Effects
- ▶ Human Capital
- ▶ Measures of Social Cohesion
- ▶ Multidimensional Students' Life Satisfaction
- ▶ Network Analysis
- ▶ Social Capital and Health Inequalities
- ▶ Social Cohesion
- ▶ Social Network Analysis
- ▶ Student Quality of Life
- ▶ Trust
- ▶ Well-Being, Student

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Colorectal Cancer

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Synonyms

Colorectal tumor; Malignancy; Neoplasm

Definition

Colorectal cancer (*CRC*) refers to a tumor sited in the colon and/or the rectum.

Quality of life (*QoL*) is commonly defined as a multidisciplinary concept including physical, emotional, and social functioning and well-being. However, there is no gold standard for the definition and evaluation of QoL in cancer patients. Generic or disease-specific QoL instruments are commonly used. The short form of the European Organization for Research and Treatment of Cancer Quality of Life Core Questionnaire (EORTC QLC SF-36) is the one most commonly used, followed by the ▶ Ferrans and Powers Quality of Life Index (QLI).

QoL in CRC patients is regarded as a main outcome which should also be taken into account besides the survival and a primary end point in clinical trials alongside with tumor response and survival.

Description

Epidemiology

Colorectal cancer (CRC) is the second more prevalent type of cancer. There is no significant difference concerning its prevalence between sexes. A 10 % prevalence for men and 9 % for women is reported, making CRC the third most common cancer in men after lung cancer (17 %) and prostate cancer (14 %) and the second most common cancer in women after breast cancer (22 %). The 5-year survival rate is estimated at approximately around 60 % (www.globocan.iarc.fr).

Surgical Treatment Options

Tumors sited in the colon or in the middle or upper part of the rectum are treated with a colectomy followed by anastomosis of the remaining parts or a temporary stoma formation. When the tumor lies in the lower rectum, the surgical treatment options include either an abdominoperineal excision of the rectum (APER) with the formation of a permanent stoma or an anterior resection (AR), a sphincter preserving strategy – with or without the formation of a temporary stoma – taking into account the level of the tumor (a distal margin of 1 cm is regarded to be adequate for a complete removal of the tumor), the degree of direct local spread, and the role of neoadjuvant therapy. Laparoscopic surgery is a well-established option in colon cancer, whereas in rectal cancer, it is a promising technique that, however, has to be further evaluated and applied under certain circumstances. The same applies to techniques like inter-sphincteric resection, transanal surgery, single incision, and robotic surgical techniques (Mathis, Cima, & Pemberton, 2011; Mulow & Winter, 2011).

Quality of Life Research Focus: Short-Term vs. Long-Term Evaluation

Research in QoL in cancer patients has mostly been evaluated in a short-term context, mainly concerning the direct impact of treatment during the first months after diagnosis. Such studies have showed that QoL is initially reduced but gradually improves over time provided that no further disease progression or recurrence occurs.

Jansen, Koch, Brenner, and Arndt (2010) conducted a review including 10 studies that evaluated the QoL in CRC patients in a long-term basis, involving ≥5 years CRC survivors. According to them, long-term CRC survivors were reported to have well to excellent overall QoL. Most CRC survivors seem to have comparable psychological QoL but slightly worse ▶ physical QoL compared to the general population. In particular, in four of those studies, psychological QoL was comparable to or even slightly higher than the general population adjusted to specific age norms, whereas one study reported worse QoL. Physical QoL was reported to be worse in CRC in comparison to the general population in three studies, whereas it was reported comparable to the general population in two studies. Depression was more prevalent among CRC survivors than among the general population, although overall psychological QoL was reported to be higher. Furthermore, CRC survivors reported many comorbidities and symptoms, with bowel problems being the leading ones, affecting mainly patients with late-stage than early-stage cancer.

QoL and Prognosis of CRC

Montazeri (2009) in a review which included six studies of patients with CRC cancer reported that QoL – especially social functioning as measured by the EORTC QLQ-30 as well as health and physical subscales of QLI – was proved to be an independent prognostic factor for survival in CRC patients. Efficace et al. (2008) had reported that social functioning was a prognostic factor for survival in CRC patients with a 6 % increase in the likelihood of an earlier death for every 10-point decrease in social functioning score in EORTC QLQ-30 questionnaire. Finally, Lis, Gupta, Granick, and Grutsch (2006) in a study of 177 patients with advanced CRC had also reported that health and physical subscale of QLI were significantly associated with survival and predictive of the latter independent of the tumor stage at diagnosis and the treatment history.

Factors Associated with QoL

Jansen et al. (2010) have conducted a recent review concerning the determinants and risk factors affecting QoL in CRC patients in the domains of demographics, health-related behaviors, physical comorbidities and symptoms, cancer-related factors, and various other factors.

Demographics

QoL was not found to be associated with *gender* or *ethnicity*. However, *age* was found to be significantly associated with QoL with older survivors showing higher overall QoL than the younger. Nevertheless, two studies reported physical QoL decreasing with age, mainly reflecting limitations in the ability to perform physical activities or specific roles. The evaluation of a potent association of psychological QoL and age led to inconclusive results. Concerning the *income*, two studies reported a positive association between income and psychological QoL. The association of income and physical QoL was not directly investigated in the studies reviewed. *Educational level* was found to be associated with physiological but not physical QoL. *Social support* was associated with better QoL, especially concerning mental QoL. The effect of social support in the domain of physical QoL is regarded to be bidirectional, since patients with higher physical QoL tend to engage more often in social activities. Finally, *marital status* was not associated with overall QoL, whereas having a partner was associated with better psychological QoL, as long as no adjustment for income was made.

Health-Related Behaviors

Concerning health-related behaviors, body mass index (BMI) was associated with lower physical QoL in *female* survivors, even after adjusting for comorbidities, age, and education, whereas there was no association between BMI and psychological QoL. No study among those reviewed investigated the relation of BMI with QoL in male survivors.

Physical Comorbidity

Comorbidities (especially diabetes, chronic pain, and coronary disease) and physical symptoms (such as urinary symptoms, chronic diarrhea) are regarded as strong determinants of QoL. However, the issue of comorbid diseases or symptoms regards some skepticism, since some of them are part of the consequences of the CRC itself.

Cancer-Related Factors

Surgical Procedure and Stoma Formation. According to Jansen et al. (2010), the results are inconclusive. Survivors with stoma are reported to show worse social QoL, while the association with physical and psychological QoL might be gender dependent, with female survivors with a stoma showing worse physical and psychological QoL. Cornish et al. (2007) in a meta-analysis of 11 studies with 1,443 patients in total had also concluded that despite the preconception that QoL would be better if a permanent stoma was avoided, the overall measures of QoL are not significantly different between APER and AR patients. However, significant differences in specific domains point to the need of individualization of care for CRC patients. Taylor and Morgan (2011) conducted a review including nine studies concerning the effects of the reversal of a temporary stoma in QoL in CRC patients. While stoma reversal mainly led to an overall improvement of QoL in CRC patients, a significant subgroup of patients continued to experience defecatory problems due to the alteration in bowel function persisting for 3 months or even 1 year after stoma reversal, leading to decreased QoL. Prior expectations and the underappreciation of the significance of stoma reversal as a surgical procedure were pointed out as important determinants affecting post-reversal QoL in CRC patients. The primary surgical technique (a pouch coloanal reconstruction or a straight anastomosis) has been reported to influence the post-reversal bowel function (with the former appearing to be more favorable) and thus the patient's physical and overall QoL.

Radiotherapy. Radiotherapy was not found to be associated with QoL in general, though a difference in physical symptoms reporting was mentioned.

Tumor Stage and Time Since Diagnosis. Factors like tumor stage and time since diagnosis

were found not to be associated with overall, psychological, or physical QoL in CRC patients.

Recurrence. The effects of recurrence were assessed in one study among those reviewed. Survivors with a recurrence in the last 5 years reported worse physical but not emotional QoL.

Finally, outing and alcohol intake were positively associated with QoL, whereas smoking, sexual activity, frequency of follow-up hospital visits, current hormone use, and traveling were not.

Personality Traits

With regard to personality factors, Paika et al. (2010) reported that the ▶ sense of coherence, i.e., "the individual's ability to demonstrate effectiveness and flexibility in coping with health stressors," and the defense mechanism of *denial*, i.e., the refusal to recognize the reality (on the whole or in some of its aspects) concerning a traumatic situation, were positively associated with health-related quality of life (HRQoL), while the defense mechanism of *repression*, i.e., keeping a traumatic situation away from consciousness, was negatively associated with HRQoL. All those associations were independent of psychological distress or disease parameters, such as duration of the disease or site and stage of the cancer. Psychological distress was also negatively associated with HRQoL. With regard to denial, the results require some skepticism, since denial itself could magnify and thus obscure the self-reported HRQoL, reflecting the same individual's attitude of denying also an impairment in his HRQoL. What is most compelling is the fact that denial should be evaluated with caution since it could represent either an adaptive or a maladaptive defense mechanism in the case of cancer, i.e., either enhancing patient's general functioning and well-being, preventing the patient from quitting or adopting a passive role on the one hand or, on the other hand, jeopardizing disease outcomes by causing a delay in seeking treatment, or impairing adherence to medical recommendations. These findings were further expanded in a progressive study by Hyphantis, Paika, Almyroudi, Kampletsas, and Pavlidis (2011), showing that psychological distress and sense of coherence independently predicted overall HRQoL, while repression – but not denial – predicted physical HRQoL in CRC patients. Lastly, Ristvedt and Trinkaus (2009) reported that trait anxiety had a significant impact on HRQoL assessed by the ▶ Functional Assessment of Cancer Therapy-Colorectal scale (FACT-C) and post-traumatic stress symptoms (PTSS) assessed by the ▶ Impact of Event Scale-Revised (IES-R) questionnaire.

Conclusion

Conclusively, several factors determining quality of life seem to be amenable to a psychiatric and psychosocial intervention. In their recent study, Gray et al. (2011) further strengthened this observation, concluding that most factors affecting QoL are modifiable, referring mainly to physical symptoms like fatigue, anorexia, and dyspnea and psychological symptoms like depression. Unmodifiable factors including the stage of the disease at diagnosis seemed to have less impact on QoL.

Such a conclusion underlines the need for an integrated and continued care for CRC patients in the domains of physical, psychiatric, and psychosocial intervention based on a bio-psycho-social approach, engaging a health care team consisting of surgeons, nurses, psychiatrists, psychologists, and social workers and expanding and fully taking to advantage the patient's social support networks.

Cross-References

- ▶ Comorbidity
- ▶ Physical QoL
- ▶ Social QoL
- ▶ Social Support
- ▶ Well-being

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Colorectal Tumor

► Colorectal Cancer

Combination Pressure

► Time Pressure

Comicality

► Humor

Commitment to the Labor Market

► Employment Commitment

Commodification

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Synonyms

Marketization

Definition

Commodification is defined as the process by means of which a good that was previously obtained through other means of distribution can now be purchased on the market. Put simply: to commodify something is to turn it into an object for sale (Radzik & Schmidtz, 1997). The process implies a significant change with regard to some goods: what was previously obtained through public regulation or private donation is now treated as an economic good, an object that can be bought by anyone who is willing to pay the price that the seller agrees to accept. The commodification of goods intrinsically connected to the human body – organs, tissue, gametes, etc. – is a topic of much ethical and legal debate.

Description

The process of commodification – not to be confused with "commoditization" – means an expanding range of "economic" goods, the kind of things that people can obtain by paying for it. In this sense, "commodification" indicates an extension of the market. For example, until a few decades ago, support systems for people with chronicle illnesses or disabilities that are the object of quality of life research in human services were never thought of as "commodities." They used to be goods that were obtained as provisions of public welfare systems or private charities – with various mixtures in between – but they were not seen as goods to be traded on markets.

"Commoditization" on the other hand is a process by which products lose their connection to specific brands and become "bulk" products subject to pricing wars between producers. Forexample, all or most DVD players answer to universal quality standards such that consumers base their purchasing decisions solely on price. Commoditization is an economic issue for producers of consumer goods. In contrast, commodification raises a cultural issue for society. There are contested commodities (Radin, 1996), goods that can be purchased but according to some should not be the object of economic transaction. The goods delivered in the area of healthcare and human services take a prominent place in the debate.

Historically, the concept of commodification is rooted in Marxist theory, where it means the transformation of social relationships, formerly untainted by commerce, into relationships of commercial exchange (Encyclopedia of Marxism, http://www.marxists.org/glossary). According to Marxist theory, the process is inherent to capitalism in that it "has resolved personal worth into exchange value" (Marx & Engels, 1998). Personal worth in this connection is a social rather than a moral concept that refers to people's activities. "The bourgeoisie has stripped of its halo every occupation hitherto honoured and looked up to with reverend awe. It has converted the physician, the lawyer, the priest, the poet, the man of science, into its paid wage labourers" (Ibid.). These examples relate to professional activities of which Marx claimed that they are no longer esteemed because of their intrinsic value.

The Marxist critique of commodification has regained momentum in the debate on the marketization of healthcare and human services in recent times, even though its proponents may not be aware of its historical origins. Commenting on the philosophy underlying managed care in the US in the 1990s Edmund Pellegrino – ethicist in Georgetown University Medical Center – wrote: "The laws of competition will reduce waste, overuse, and error to everyone's advantage. Medicine will be demystified, physicians will become employees, and physicians' decisions will be shaped to conserve society's resources" (Pellegrino, 1999, pp. 244–245). In accordance with the Marxist view, Pellegrino points out that marketization of healthcare will affect relations between people, to begin with "the personal relationship between a health professional and a person seeking help" (Idem, 247). Similarly, feminist philosopher and ethicist Virginia Held has argued "From the perspective of care, markets should be limited rather than become ever more pervasive, as they undermine the caring relations in which persons [stand] and the relations between them are valued for their own sakes" (Held, 2004, p. 148). In contrast, those who support marketization of healthcare argue that "free competition" does for healthcare and human services what it has done for other businesses: it will lower prices, and therefore public spending, it will increase quality because providers have a stake in more satisfied clients, and it will shift power to users because they will punish bad quality and inconvenient delivery (Hertzlinger, 1997).

Taking changing professional relationships as a primary feature of commodification in healthcare, the question is not only how commodifying its services will change relations between professionals and their clients, but also how professionals relate to their practices. Before we turn to these points, the societal background against which the debate on commodification develops will be briefly addressed. This is usually characterized as the rise of new public management (NMP).

NPM is understood as the application of neoliberalism on public administration in the western world during the 1980s and 1990s (Peters, 2001). Its basic tenets follow from neoliberal economic theory, key to which is the equation of the logic of market choices and of public choices. NMP prescribes the state to behave as if it were a for-profit corporation acting on competitive markets. "Citizens should be regarded as customers and local managers of (publicly financed) services should compete for these customers. If dissatisfied with the service they get, instead of appealing to rules guarding their rights citizens should "vote with their feet" by exercising market choice and turn to another service provider. For the providers of public services, flexibility and customer satisfaction is more important than rule-bound behaviour and results are more valued than correct procedures" (Pierre & Rothstein, 2008, p. 3).

Changing professional relationships in healthcare as described in the literature clearly fit this account. Using market mechanisms to lower the costs and improve the quality of services, governing authorities have forced healthcare providers and their professionals into seeing their clients as customers to be satisfied, rather than as patients whose needs are to be met. According to the critics of commodification such as Pellegrino and Held, these mechanisms are likely to damage professional relationships. The client is simultaneously a person in need and a possible source of financial gain or deficit (Held, 2002). Losing a patient is costly; attracting one is profitable, unless that patient has needs that are difficult to fulfill. In that case, the logic may be reversed. In Pellegrino's view, commodification means "the relationship will be primarily, or solely regulated by the rules of commerce and the law of torts and contracts rather than the precepts of professional ethics" (Pellegrino, 1999, p. 252). While there seems to be no necessity in reversing the priority of treatment considerations in this manner, it is difficult to deny that among the effects of commodification is the emergence of mixed motives creeping into professional relationships.

Among the benefits of human services is the fact that its clients experience that they are attended to, that there are people who are supportive. The good of healthcare entails compassion (Kaveny, 1999). Clients are to be treated kindly, patiently, and respectfully, not because it is profitable, but because it is part of what it is to "serve" someone. In terms of the logic of the market, however, spending time and being attentive are "transaction costs," which can be accounted for to the extent that the transaction is successful. In other words, being friendly is valuable insofar it pays off; the value of professional attitudes is instrumental to economic result.

A particular feature of commodification that deserves to be mentioned in this connection is called "fungibility." As long as quality and price of any given product are the same, consumers may have no interest in who produces it. Turning the delivery of healthcare and human services into a commodity may have the same effect. Following the logic of market transactions, it does not matter who provides them. This feature can have a liberating effect. When clients are not dependent upon a particular relationship but are free to chose by whom they want to be served, this can be regarded as a sign of empowerment. The implication is, however, that the fungibility of the service itself is followed by the fungibility of the professional, which in turn leads to the fungibility of clients. Critics of commodification of healthcare argue that the logic of the market will in the end turn against patients, making them disposable (Pellegrino, 1999; Zoloth-Dorfman & Rubin, 1995). The market has no place for an independent value in the quality of professional relationships, because sellers and buyers of goods have as such no interest in one another. Particularly in the area of long-term services, this aspect of marketization of services seems strongly counterintuitive (Reinders, 2010).

The second point to be considered is how professionals relate to their own practices. The effect of marketization described so far can be restated in terms in the distinction between "internal" and "external" goods. Professionals are motivated, presumably, by the specific goods can be that are internal to their profession. In the case of healthcare and human services, these goods specified as various aspects of

human well-being (health performance, occupation, living indepedently, etc.). To be engaged in the pursuit of these goods is definitive of professional practices (Macintyre, 1981). At the same time, however, the side effect of being a good professional is to earn one's share in its "external" goods: status, power, and money. The marketization of services reverses the priority of both kinds of goods. It uses the pursuit of external goods as incentive in order to improve on the pursuit of internal goods (Reinders, 2008a). Guus Schrijvers, a Dutch professor of public health, acknowledges that the provision of healthcare is changed into an enterprise that is "devils driven" because of this type of incentives. "It is not my first choice to create a competitive health world. There is a risk that providers are more driven by market share, returns and profits and not by solidarity, equal access for everyone and evidence based medicine. However, if this is the dominant trend, let's cope with it" (Schrijvers, 2007). As the critics of this development point out, however, the effect may well be a transformation of professional practices that erodes intrinsic motivation as a major source of the pursuit of high-quality services (Kaveny, 1999, Reinders, 2008b).

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Common Beliefs Survey-III (CBS-III)

► Need for Approval Measures

Common Dyadic Coping

► Collaborative Problem Solving, Crises, and Well-Being

Common Good

► Conceptualizing Democracy and Nondemocracy
► Public Interest

Commonality Among Nationals

► Measuring National Identity

Commonwealth Interest

► Public Interest

Communal Coping

► Collaborative Problem Solving, Crises, and Well-Being

Communal, Collective, Societal, Common, Companiable Adjustment

► Psychosocial Adjustment (Includes Psychosocial Functioning and Well-Being)

Communication and Marital Satisfaction

► Marital Communication

Communication and Personal Well-Being

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Synonyms

Communication and quality of life

Definition

Communication and personal well-being refers to how human beings create, transmit, and interpret messages between two or more people and the well-being, or quality of life, of those individuals who are parties to that communication.

Description

As inherently social creatures, most human beings find their greatest source of ► happiness and satisfaction in relationships with other people. Communication is the process by which people create, transmit, and interpret messages. The exchange of messages between two people is characterized as interpersonal communication. Much of what is known about communication and personal well-being concerns the role of interpersonal communication in quality of life. However, other communication contexts such as small group communication, organizational communication, and even mass communication can also be associated with personal well-being.

People use interpersonal communication to establish, build, maintain, and terminate social relationships. Research shows that personal well-being is closely tied to the well-being of people's interpersonal relationships. In general, people who enact effective and appropriate communication behaviors tend to experience greater personal well-being than people who use problematic and ineffective communication with other people. Also, being the recipient of problematic communication behaviors, especially from spouses or parents, is associated with diminished ► personal well-being.

The study of communication and personal well-being can be usefully organized around different domains of quality of life in which communication behaviors have been implicated. The terms "well-being" and "quality of life" are often used synonymously in the research literature (John & Wright, 2005). Most analyses of quality of life suggest that there are numerous important domains in which people can experience a sense of well-being. These include psychological, social, and physical well-being or quality of life (e.g., Haas, 1999).

Social Well-Being

Perhaps the most obvious connection between communication and personal well-being is in the domain of social well-being. This is because communication is the essential substance of all social relationships. Social relationships are an

important source of satisfaction on their own, in addition to helping people more effectively cope with the stressors that they encounter (Ruta, Camfield, & Donaldson, 2007). Therefore, communication generates positive effects on personal well-being through rewarding and helpful relationships with other people.

Many of the communication behaviors that predict quality of life in the domain of social relationships can be organized under the heading of socials skills, also referred to as communication skills or interpersonal competence. Social skills involve the knowledge and production of appropriate and effective communication behaviors. These communication behaviors include both verbal behaviors such as making appropriate self-disclosures and using effective conflict management strategies and nonverbal behaviors such as making eye contact, gesturing, speaking at a moderate rate, using vocal inflection, and appropriate use of touch such as in shaking hands. People who possess good social skills generally enjoy higher quality of life in the domain of social relations than people with social skills deficits (Buhrmester, Furman, Wittenberg, & Reis, 1988; Riggio, 1986). This quality of life is evident in phenomena such as higher dating frequency, popularity among friends, lower levels of loneliness, and higher numbers of close friends and acquaintances.

One of the most important social relationships for many people is their marriage. About 90 % of all Americans expect to get married. Satisfaction with marriage is determined in large part by the nature and quality of the communication exchanged between spouses. Happily married couples communicate in such a way as to be responsive to bids for attention from their partner, they openly express affection, use humor, they accept influence attempts from their partner, and they create a shared relational culture by discussing their likes and dislikes and finding common ground (Gottman & Silver, 1999). Even when dealing with areas of disagreement, stable and happily married couples use far more positive communication behaviors (e.g., expressing agreement, compliments) than negative communication behaviors (e.g., sarcasm, withdrawal).

Positively toned communication behaviors appear to enhance ▶ marital well-being. In contrast, there are a number of highly corrosive communication behaviors that damage marital well-being and signal that the relationship is headed toward dissolution. Psychologist John Gottman and his associates have identified four such marital communication behaviors that he refers to as "the Four Horsemen of the Apocalypse" (Gottman, 1994). The first is a complain/criticize pattern of communication where one spouse expresses dissatisfaction with some aspect of the relationship and couples it with a criticism of the partner (e.g., "you never help out with any of the household chores"). The second is defensiveness which occurs when one spouse presents a complaint to the other who responds by trying to deflect blame and deny responsibility while whining. The third corrosive behavior is contempt. This occurs when a spouse mocks or insults his or her partner, often with hostility or sarcasm (e.g., "oh, that was just *brilliant*"). The final of the four behaviors is stonewalling. Stonewalling signals the end of communication between spouses because it occurs when one spouse does not respond to the other. When stonewalling occurs, one spouse does not even acknowledge the presence of the other. The problem with all of four of these communication behaviors is that they perpetuate rather than resolve conflicts in addition to sending a clear message of dislike from one partner to the other. Gottman and his associates find these to be strong predictors of eventual divorce.

Health-Related Well-Being

Interpersonal communication plays a vital role in both promoting and disrupting ▶ physical well-being. The physical dimension of quality of life is equivalent to being in good health and having minimal health problems. Marriage is one of the major interpersonal contexts in which communication behaviors have been linked to physical quality of life. As an example, for both married men and women, health problems are highest among those who report frequent arguments with their spouse and who

feel that they are not understood by their spouse (Ryff, Singer, Wing, & Love, 2001). Both of these predictors of health problems suggest obvious difficulties with fundamental communication processes in the marriage. Marital interaction can affect people's physiology (Kiecolt-Glaser et al., 1996). Negative ▶ marital communication such as excessive arguing, conflict, and hostility creates stress reactions that can have deleterious health consequences when experienced over long periods of time. Interpersonal conflict can also increase the risk for heart disease and a host of other stress-related health problems. In the Stockholm Female Coronary Risk Study (Orth-Gomér et al., 2000), women were asked about the quality of their marital relationship with questions such as "Are there things you can't talk openly about with each other?" and "Have you solved problems actively together?" Women with a poor profile on this instrument, indicating that their marriage is a source of stress, had a 2.9-fold increase in the risk of recurrent coronary events such as heart attack.

Conflicts and arguments not only affect the health-related quality of life of spouses, but their children as well. Children who grow up in family environments marked by high levels of conflict, disagreement, arguing, and hostility show signs of physiological stress (e.g., high blood pressure) as well as poor health relative to children who grow up in more harmonious family environments. Among children with existing health problems (e.g., diabetes, asthma), dysfunctional communication patterns that involve triangulation, coalitions, inappropriate expression of affect, and lack of direct communication predict greater problems with management of the child's health condition. Scientists theorize that this happens because problematic family communication patterns may interfere with effective adherence to treatment regimes that in turn further compromise health-related quality of life in the sick child.

Another important context in which communication plays a major role in health-related quality of life is patient-provider interactions. The quality of interactions between patients and their health care providers can influence the effectiveness of medical treatments. Collaborative patient-provider interactions are often held up as an ideal and are assumed to be associated with more favorable health outcomes for patients. In such collaborative interactions, providers would clearly explain options to patients and actively listen to their responses. Patients, in turn, would have a sense of rapport with the provider and feel comfortable asking questions. Collaborative patient-provider interactions in fact require good basic communication skills (e.g., interviewing skills, listening, questioning, perception of nonverbal communication behaviors) on the part of the patient and provider. Educational efforts can improve the quality of patient-provider communication, which in turn promotes greater satisfaction with the health care encounter. However, evidence supporting the improvement of actual patient health outcomes is somewhat equivocal.

Psychological Well-Being

The connection between communication and the psychological dimension of well-being is especially powerful in that interpersonal communication problems have been implicated in a host of psychological disorders (Segrin, 2001). Dysfunctional family and interpersonal communication patterns have been linked with such diverse mental health problems as depression, social anxiety, loneliness, eating disorders, alcoholism and other forms of substance abuse, and schizophrenia. In some cases, the communication problems appear to precipitate the disorder, in others they affect the course of the disorder, and in still other cases, disrupted interpersonal communication appears to be a consequence of the mental health problems.

Schizophrenia is a profound thought disorder that is characterized by hallucinations, delusions, and inappropriate emotional expression. Several family communication processes appear to play a role in the course of this serious mental health problem. For example, family communication deviance reflects a failure to maintain a shared focus of attention in conversation due to odd word usage, sentences with no clear object of discussion, internal contradictions, and

incomprehensible comments. Communication deviance is common in the discourse of patients with schizophrenia as well as their parents (Miklowitz et al., 1991). When patients with schizophrenia are discharged to a household that is high in communication deviance, they are more likely to have a relapse over the following year compared to those whose parents exhibited minimal communication deviance (Velligan et al., 1996). Another family communication construct that appears to affect the course of schizophrenia is family affective style. Family affective style is the emotional climate of the family as evident during face-to-face interactions, particularly with respect to phenomena such as criticism, hostility, and overinvolvement, that reflect a dysfunctional parental attitude toward the child (Doane, West, Goldstein, Rodnick, & Jones, 1981). A negative family affective style is conveyed in both verbal communication behaviors (e.g., "You have an ugly, arrogant attitude," "You cause our family an awful lot of trouble") as well as nonverbal communication behaviors (e.g., gaze aversion, backward lean, nervous gesturing). Children at risk for developing mental health problems are more likely to develop schizophrenia if they are reared in a family communication environment that has a negative, rather than positive, affective style (Doane et al., 1981).

Eating disorders are potentially serious mental health problems as they represent a substantial increase in risk of mortality and are also linked to communication problems. Studies of family interaction consistently implicate a corrosive pattern of parent-to-child communication in families with daughters who have either anorexia nervosa or bulimia nervosa. That pattern entails intrusiveness and overinvolvement coupled with lack of emotional availability or affection. This pattern of seemingly contradictory parental behavioral is often characterized as "affectionless control." This family communication pattern is manifest in neglectful and ignoring communication that is not responsive to the child during the family discussion. At the same time, parents of young people with eating disorders sometime become intrusively involved in their children's lives, setting up a struggle for control. Mothers of daughters with bulimia are often more belittling and blaming during family interactions compared to mothers of healthy daughters.

Depression is psychological problem that is associated with a variety of troubles with interpersonal and family communication. Poor social skills are sometimes evident in the interpersonal communication of people with depression (Segrin, 2000). These communication problems take the form of negative verbal behaviors such as complaining and pessimism as well as nonverbal behaviors suggestive of sadness and indifference (e.g., gaze aversion, speaking in a monotone, holding the head in a downward position, slow speech rate). Research has identified numerous communication problems in the family of origin and the family of orientation of people with depression. For example, the same affectionless control family of origin communication pattern that is evident in the history of many young people with eating disorders is also prevalent in the background of people with depression. In the family of orientation, research reveals problems with communication between depressed mothers and their children and between spouses where one member is depressed. During interactions about a relational conflict, depressed wives make substantially more aggressive statements (e.g., negative solution, disagreement, criticism) to their husbands than nondepressed wives do (Schmaling & Jacobson, 1990). During family problem-solving discussions, couples with a depressed wife tend to make fewer positive (e.g., agreement, assent, approval) and fewer congenial (e.g., humor, laugh) utterances than nondepressed control couples (Johnson & Jacob, 1997). The proportion of positive to negative talk also tends to be tipped far more in favor of the negative among couples with a depressed wife compared to nondepressed control couples.

Just as psychological quality of life is compromised by interpersonal communication problems, people with good communication skills tend to enjoy better psychological quality of life. People with good communication skills tend to report higher ▶ life satisfaction, hope, and

happiness and lower levels of perceived stress than people with poor communication skills (e.g., Segrin & Taylor, 2007). The possession of good communication skills allows people to develop and maintain positively toned relationships with other people that in turn enhance psychological quality of life.

Communication plays a vital role in maintaining or disrupting personal well-being. In the domain of social well-being, communication is the mechanism by which people develop and maintain the social relationships that create happiness and life satisfaction. In the domain health-related quality of life, research shows that a variety of dysfunctional communication processes are associated with poor health and health management, especially stress-related health problems. Finally, communication is a fundamental process that is implicated in numerous problems that represent poor ▶ psychological well-being. When communication from other people, especially close family and friends, is hostile, belittling, peculiar, or otherwise enacted with malfeasance, the psychological toll on the recipient can be dramatic.

Cross-References

▶ Marital Communication

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Communication and Quality of Life

▶ Communication and Personal Well-Being

Communication of Affect Receiving Ability Test (CARAT)

▶ Measuring Emotion Recognition Ability

Communication, Computer-Mediated Support, and Satisfaction with Health

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Definition

Communication, computer-mediated support, and satisfaction with health is a general concept referring to the use of one or more Internet-based communication technologies to facilitate the exchange of social support and, consequently, influence satisfaction with personal health. Three components of this definition warrant further explication: *computer-mediated communication* is an umbrella term that generally refers to Internet-based communication technologies; computer-mediated communication includes, but is not limited to, e-mail, instant messaging, weblogs (i.e., blogs), discussion groups, social network websites, and micro-blogs. *Social support* refers to communication that functions to manage uncertainty and increase one's perception of control (Goldsmith & Albrecht, 2011). *Personal health* may consist of physiological functioning and/or psychological well-being.

Description

The study of computer-mediated forms of social support and health is rooted in broader questions about the implications of communication technologies and can be traced back to research conducted by scholars studying computer-mediated communication in organizations. Scholars representing the *cues-filtered-out perspective* (for a review, see Culnan & Markus, 1987) argued that the reduced social cues (e.g., eye contact, gesture) available in computer-mediated environments would lead to impersonal communication. The restriction in nonverbal cues such as facial expressions caused by computer-mediated communication was postulated to hinder the formation and development of personal relationships. Social support, from this perspective, would be unlikely as would any salutatory outcomes for personal health.

Increased Internet penetration during the 1990s led to more direct questions about the impact of computer-mediated communication use on social connection and well-being. In the HomeNet study, Kraut and his colleagues (Kraut et al., 1998) surveyed 169 adults during their first 2 years of Internet use. Participants started using the Internet during 1995 or 1996. Internet use, which included social (e.g., e-mail) and nonsocial (e.g., web browsing) uses, was associated with increased loneliness and depression. The results from this study were widely publicized in the news media including headlines such as, "Sad, Lonely World Discovered in Cyberspace," which appeared in *The New York Times* (Harmon, 1998). Kraut and colleagues (Kraut et al., 2002) conducted a follow-up study with the original HomeNet participants after their third year of Internet use and reported no significant associations between Internet use and loneliness or depression. Since Kraut and his colleagues' works were published, several studies have demonstrated that various forms of computer-mediated communication offer some novel opportunities for exchanging social support and improving satisfaction with personal health. Research on e-mail (Campbell-Grossman, Hudson, Keating-Lefler, & Heusinkvelt, 2009), computer-mediated support groups (Rains & Young, 2009; Tanis, 2008a), and blogs (Rains & Keating, 2011) offers evidence that use of computer-mediated communication to acquire social support is associated with elements of well-being.

As previously discussed, several different communication technologies may be used to achieve computer-mediated support. Technologies such as e-mail and instant messaging make it possible for individuals to connect with

existing friends and family. Strong ties (Albrecht & Adelman, 1987) such as friends and family can be a critical resource for various types of social support such as comfort and assistance. Computer-mediated support groups make it possible to connect with weak ties (Granovetter, 1973) in the form of acquaintances who are suffering or have suffered from the same health condition. Weak ties are a valuable resource for social support because they often share similar experiences as the support seeker, have the potential to be relatively objective, have fewer competing interests, and make self-disclosure less risky (Adelman, Parks, & Albrecht, 1987; Wright & Miller, 2010). Computer-mediated support groups can take the form of formal computer-mediated groups that have an educational component, fixed duration, closed membership, and may include a medical expert serving as a leader (Rains & Young, 2009). The Comprehensive Health Enhancement Support System (CHESS) is one example and includes access to medical information, skills training, decision support, and a discussion forum (Gustafson et al., 2002). Informal computer-mediated support groups, such as one might find at WebMD.com, have an open membership, unlimited duration, and generally lack an educational component or an official leader with formal medical training (although the group may have a moderator). Finally, social network websites and blogs make it possible to connect with both strong and weak ties.

There are also several dimensions of computer-mediated communication that have been argued to facilitate access to or the exchange of social support. Convenience, or perceptions of the difficulty associated with gaining access to and using a particular communication technology, is heralded as central benefit of computer-mediated support (Tanis, 2008b). Particularly for individuals who live in rural areas or are mobility impaired, computer-mediated communication makes it possible to gain access to support without leaving one's home. Anonymity and reduced social cues are important because they allow support seekers to feel comfortable making disclosures about their health experiences (Rains & Young, 2009; Tanis, 2008a). The ability to conceal one's identity and not make eye contact with or witness the facial expressions of potential support providers may encourage self-disclosure and increase the possibility of acquiring social support. The potential to communicate asynchronously is a final dimension of computer-mediated communication that might facilitate the exchange of social support (Rains & Young, 2009; Wright & Bell, 2003). The time for message construction made possible by asynchronous communication creates the opportunity for greater control over attempts to acquire social support.

Cross-References

- ▶ Quality of Life
- ▶ Social Support
- ▶ Well-Being

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Communication, Sexual

▶ Sexual Satisfaction, Self-Esteem, and Assertiveness

Communicative Correlates of Family Satisfaction

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Synonyms

Satisfaction with family relationships

Definition

Family satisfaction refers to perceptions of family quality such as ▶ solidarity, ▶ happiness, and overall relational well-being. Family satisfaction has been conceptualized and operationalized in a variety of ways including individual perceptions, dyadic relationships (e.g., marital, sibling), and more global attributes of the family system. Research on communicative correlates of family satisfaction posits that the relationship between communication and satisfaction is more nuanced than simple characterizations of communication as positive or negative interactions.

Description

Research on communicative correlates of family satisfaction can be categorized into ***systemic family patterns and standards*** or ***family (sub) systems***. *Systematic family patterns and standards* refer to communication that affects and reflects the global culture of the family system including individuals' perceptions of communication in the family. In the following section, we summarize four systemic family patterns and standards: family communication patterns, family communication standards, family stories, and parenting styles.

Family Communication Patterns

Based on McCleod and Chaffee's (1972) initial work on communication in the family, Ritchie (1991) introduced two dimensions of the family communication climate: *conversation orientation* and *conformity orientation*. Conversation orientation reflects the extent to which open communication, free exchange of emotions and ideas, and frequent interaction is supported and encouraged in the family. Conformity orientation refers to parental expectations concerning shared ▶ values, attitudes, and beliefs among the family. Theorizing on family communication patterns suggests that conversation and conformity orientation often work in tandem to influence individual and family outcomes. As such, four

family types emerge based on the extent to which families embrace these orientations: pluralistic (high conversation, low conformity), consensual (high conversation, high conformity), protective (low conversation, high conformity), and laissez-faire (low conversation, low conformity). Schrodt, Witt, and Messersmith's (2008) meta-analytical review of research on family communication patterns introduces three broad categories of outcomes in association with these behaviors: information processing outcomes, behavioral outcomes, and psychosocial outcomes. Psychosocial outcomes include aspects of family satisfaction such as relational solidarity, closeness, and general well-being.

Family Communication Standards

Individuals hold ideals and expectations about their relational communication, and Caughlin (2003) extended this idea to the family environment identifying various standards for family communication practices endorsed by individuals: openness, maintaining structural stability, expression of affection, emotional/instrumental support, mind reading, politeness, discipline, humor/sarcasm, regular routine interaction, and avoidance. There are three hypotheses associated with the relationship between family communication standards and family satisfaction. The *distressful ideals hypothesis* suggests that certain standards are associated with family satisfaction. For instance, endorsing openness and supportive communication is associated with family satisfaction. The *unmet ideals hypothesis* suggests that the extent to which actual family communication practices differ from one's family communication standards influences family satisfaction. Finally, *discrepancy violations hypothesis* extends the *unmet ideals hypothesis* to include evaluation of the discrepancy (i.e., positive or negative) between standards for family communication and the actual behaviors in the family. Findings support both the unmet ideals and distressful ideals hypotheses when considering the relationship between family communication standards and family satisfaction.

Family Stories

Family stories provide a window into family culture, affecting and reflecting the values, lessons, rules, and behavioral guidelines families hold dear. Families tell stories to socialize members, to remember, to entertain, to build relationships, to make sense of difficulty, and to build a sense of family identity. Global family story themes have been linked to family satisfaction such that individuals whose family stories revolve around togetherness, care, and humor were found to be more satisfied than people whose stories revolved around themes such as hostility and divergence (Vangelisti, Crumley, & Baker, 1999). Similarly, families who told stories about accomplishment reported higher levels of family satisfaction than those with stories about ▶ stress (Koenig Kellas, 2005). Spouses who characterized their lives as chaotic in oral history interviews of the couple's beginning were less satisfied, whereas those who gloried in the struggle were more satisfied over time (Buehlman, Gottman, & Katz, 1992). Global story themes that reflect marital bond (Doohan, Carrére, & Riggs, 2009) and devotion-caring (Jackson, Chen, Guo, & Gao, 2006) also positively predict marital satisfaction.

Parenting Styles

Baumrind's (1971) seminal work on parenting styles identified three primary types of parenting: *authoritative, permissive, and authoritarian.* Authoritative parents offer a balance of warmth (e.g., nurturing, affection) and recognition of child's individuality with reasoned standards for compliance with parental authority. Permissive parents offer nurturing and affection with minimal control over children's activities and behaviors. When disciplinary action is taken, it is often done so without reasoned argument or rationale for the child. *Authoritarian* parenting is characterized with firm control, high demands, and punitive outcomes. Respect for role relations and hierarchy is endorsed, and there is less emotional and supportive communication compared to the other parenting styles. In general, authoritative parenting has been linked with higher levels of relational (e.g., parent–child)

and family satisfaction. Research on parenting styles has been applied to diverse family forms (e.g., stepfamilies) often supporting the positive aspects of authoritative parenting. Parenting styles research often conceptualizes a singular parenting style. Given that parents may have different approaches to interacting with children, researchers also point to the importance of understanding the unique and combined contribution of co-parents in both intact and stepfamilies (Doherty & Beaton, 2004).

Family (sub)system processes refer to communication typically between family dyads (e.g., spouses, parent–child relationships) or triads (custodial parent-stepparent-child). Although often reflecting systemic family patterns and standards, dyadic and/or triadic processes can vary by individuals or relational partners and often lead to different outcomes for individual family members. In the following section, we summarize nine family (sub)system processes: accommodation, conflict, demand/withdraw, everyday talk, family storytelling, hurtful messages, relational maintenance strategies, social support and comforting messages, and topic avoidance.

Accommodation

Accommodation refers to the extent to which family members attune (or fail to attune) their communication to the perceived or actual expectations, needs, or desires of other family members (Harwood, Soliz, & Lin, 2006). Accommodation represents a variety of behaviors such as topic management, interpretability strategies, and shifts in dialect or speech styles. Because accommodation is typically motivated by desires for interpersonal affiliation, this form of communication is associated with relational satisfaction. Conversely, failing to adapt one's communication (e.g., nonaccommodation) is perceived negatively and, thus, associated with decreases in relational solidarity. Accommodation theory has been applied to the family context primarily to understand identity and role-relation difference. For instance, in grandparent-grandchild relationships, age identity is associated with different communicative expectations, thereby positioning (non)accommodation at the forefront of intergenerational solidarity in the family.

Conflict

Conflict has received considerable attention from family scholars given the overarching conclusion that conflict is unavoidable, yet not necessarily associated with decreases in relational satisfaction. In fact, research has demonstrated that constructive conflict styles such as *positive problem-solving* (Gottman & Krokoff, 1989) are positively associated with marital satisfaction compared to other conflict behaviors that are more belligerent or emotionally loaded (Segrin, Hanzal, & Domschke, 2009). As such, what plays an important role in differentiating positive and negative outcomes of conflict is the communicative skills of family members (Sillars, Canary, & Tafoya, 2004).

Demand/Withdraw

A pattern of interaction in which one partner criticizes the other often leading to active avoidance from the other partner is known as *demand/withdraw*. Whereas demand/withdraw has been shown to be negatively associated with relational satisfaction when satisfaction is assessed at approximately the same time as the interactions, longitudinal studies suggest that demand/withdraw may have various effects on relational solidarity over the course of the relationship (Caughlin, 2002). Demand/withdraw has been applied primarily to marital relationships with cross-cultural support for the negative implications on satisfaction (Christensen, Eldridge, Catta-Preta, Lim, & Santagata, 2006). More recently, family scholars have examined the role of demand/withdraw in parent-adolescent relationships (e.g., Caughlin & Malis, 2004), finding similar negative associations between this behavior and relational solidarity outcomes.

Everyday Talk

At the heart of research on everyday talk is that it is the seemingly ordinary and routine interactions (e.g., small talk, gossip, reminiscing, decision-making, joking) that play a significant

role in engendering relational quality and family satisfaction (Duck, Rutt, Hurst, & Strejc, 1991; Goldsmith & Baxter, 1996).

Family Storytelling

Family storytelling has been referred to as joint, collaborative, and/or conversational storytelling, is often assessed through guided procedures like the oral history interview, and is typically examined in a subset of the family system (e.g., spouses, parent–child, triads) as they interactively co-construct family stories. Extant research links storytelling process and content to satisfaction. Processes such as interactional sense-making – including engagement, turn-taking, perspective-taking, and ▶ coherence – have been linked to family satisfaction (Koenig Kellas, 2005; Trees & Koenig Kellas, 2009). Moreover, husband and wife similarity in storytelling conflict (Veroff, Sutherland, Chadiha, & Ortega, 1993a) and continuation (telling the story without acknowledging interruption) has predicted marital stability (Veroff, Sutherland, Chadiha, & Ortega, 1993b). The content of family storytelling is also linked to family satisfaction. Spouses and family triads who communicate a sense of we-ness (Honeycutt, 1999; Koenig Kellas, 2005), emotional coherence (Oppenheim, 1996), breadth, and positive appraisals (Flora & Segrin, 2003) have reported higher satisfaction.

Hurtful Messages

Feelings of hurt result from actions, words, or relational transgressions that communicate relational devaluation and result in a sense of personal or emotional injury (see Vangelisti, 2007). Hurt represents a mingling of emotions such as ▶ anger, hurt, shame, ▶ anxiety, and guilt. Hurtful messages include informative, evaluative, and accusatory statements, as well as jokes, threats, and lies, among others. Messages from family members have been reported as more hurtful than messages from other relational partners (Vangelisti & Crumley, 1998), and some families create more hurtful family environments than others (Vangelisti, Maguire, Alexander, & Clark, 2000). The degree to which people perceive messages as hurtful depends on the degree to which they believe the message was intentionally hurtful, their perceived ability to respond, and the extent to which they expect hurtful communication from the other person. Degree and impact of hurt (Vangelisti & Crumley) as well as frequency (Kennedy-Lightsey & Dillow, 2011) negatively predict family satisfaction.

Relational Maintenance Strategies

Relational maintenance strategies consist of five behavioral categories that have been linked to interpersonal and marital satisfaction (Stafford & Canary, 1991). These strategies included positive communication (positivity), frequent and direct discussions of the relationship (openness), affectionate expressions of emotions (assurances), shared activities with family and friends (▶ social networks), and equality in household tasks and responsibilities (sharing tasks). Stafford and Canary (2006) suggest that the association between relational maintenance strategies and marital satisfaction is also a function of perceptions of ▶ equity in the marriage (i.e., do partners believe there is equality in terms of the efforts they put into and benefits they receive from the marriage).

Social Support and Comforting Messages

The relational and personal benefits of ▶ social support networks and supportive communication have been well documented in interpersonal research (MacGeorge, Feng, & Burleson, 2011). As in all contexts of interpersonal relationships, effective comforting messages in the family are those that are person centered (i.e., receiver centered), nonevaluative, or judgmental and attend to emotional experiences of the family member (Burleson, 1994). In addition to the role of supportive and comforting communication in everyday experiences, the literature on families has focused on social support in specific familial circumstances (e.g., chronic health conditions, children with disabilities). Traditionally, social support and coping has been conceptualized as a dyadic process with individual outcomes.

More recently, family scholars have turned their attention to *communal coping* in which coping and effects of social support are understood on a more family system-level perspective in which multiple members of the family experience directly or indirectly the same stressors and/or pool resources to provide support and cope with the circumstances (Afifi, Hutchinson, & Krouse, 2006).

Topic Avoidance

Family secrets, self-disclosure, and topic avoidance are enacted with various relational goals, motivations (e.g., familial exclusion, relational bonding), and different outcomes in the family relationships (Afifi & Guerrero, 2000; Vangelisti, Caughlin, & Timmerman, 2001). As such, the relationship between topic avoidance and family satisfaction is complex and dependent on numerous cognitive (e.g., motivation), relational, contextual, and communicative (e.g., nature of disclosure, strategy of avoidance) factors.

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Communist Regimes, Quality of Life in

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Description

The theme of the ▶ quality of life (QOL) was a point of intersection between three paradigms of thought, expressing different ideologies, social experiences, problems, and aspirations: the prosperous capitalist Western paradigm, the Marxist-Leninist one developed within the program of the Soviet-type communist construction, and of the Third World countries who also tried to develop their own view on the QOL.

The explanation of the impact of the QOL theme in the socialist countries can be sought on two distinct plans:

- Historic lag: the exploding interest for the QOL subject in the West in the 1970s coincided with the beginning of an economic and social crisis in the communist countries, which generated a process of political and ideological *reclosing*.
- Structural incompatibility between the paradigms of the quality of life crystallized in the West and in the Soviet Marxist-Leninist-dominated countries.

International Context

The dynamics of the QOL theme proved to be sensitive to the *historic folds of the world*. Due to the rapid economic growth, the West was confronted with an unexpected challenge: which is the human benefit of the *consumerism* (see ▶ Consumer society) associated with the promised economic prosperity? The exploration of alternative lifestyles gave way to a reorientation towards the *real* human needs. The Northern countries were particularly concerned by this subject (Galtung & Wemegah, 1978).

The Club of Rome, bringing to discussion the *limits of growth* (see ▶ Economic growth), generated, at its turn, the need of rethinking the direction of the whole world, different from the mere continuous economic growth as automatic solution to all social and human problems. If the hope for economic growth which to ensure prosperity for all is arguable, a question arises: how could we construct a socially balanced world under the conditions of *zero growth*? The QOL could represent a key element for a new social balancing.

The *Third World*, *nonaligned*, torn between two superpowers, the capitalist West and the Soviet socialist world, was tempted to find a third way for global development of the world. The alternatives provided by the two powers were the perspective of a prosperity quickly obtained through the growth of the capitalist economy or the Soviet way based on the communist revolution. The third alternative was a program of global development centered on human development, like the one formulated by the group supported by the Bariloche Foundation from Argentina (Mallmann, Nudler, & Max-Neef, 1979).

The sociological program monitoring the quality of life, besides the strictly scientific challenge, was certainly animated by a tacit intention of *social reform by the humanization* not just of the economy, but of all spheres of the social life. Along with the economic indicators, strongly institutionalized, it became clear the need for a comprehensive set of social indicators. The ▶ Institute for Social Research Michigan (ISR) launched a program to work out a set of sociological indicators of the quality of life (see Andrews & Withey, 1976; Campbell, Converse, & Rodgers, 1976), expanded by Stanley Seashore (1976) through the paradigm of the *quality of work life*. The comparative Scandinavian study led by the group of compared sociological research of the Helsinki University, conducted in 1972 in Denmark, Finland, Norway, and Sweden, also focused on welfare and the quality of life (Allardt, 1976). The *program of the* ▶ social indicators, launched in force in the 1960s, provided an extremely favorable framework. The QOL indicators, proposed by the sociologists, promised a new orientation and a corrective feedback for the whole social process.

At the end of the 1970s and particularly in the 1980s, a global change of perspective was produced in the entire world. The dreams of a quick, problem-free prosperity vanished in the West too. A new, neoliberal, approach became dominant. Along with this, the basis of the program for life humanization eroded.

The economic and social crisis became dramatic in the socialist countries. The hope that the Soviet pattern will lead to prosperity was replaced by a muffled conflict between the pressures for system reform and the political repression. The collapse of the Soviet system's power caused the disappearance of its world alternative and, together with it, the dream of the third way. The programs such as that of the Bariloche Foundation have been replaced by the IMF and World Bank program.

The QOL Theme: Opportunity or Challenge for the Socialist Countries

For the socialist countries, the QOL theme, through its substance, should have been very attractive. The communist ideology contains a basic humanist option: building a human society focused on the plenary accomplishment of the man with his multiple necessities.

In almost all socialist countries existed, however, a consensus of rejecting the quality of life theme launched in the West, both of its scientific legitimacy and of its relevance for the socialist societies. The term *quality of life* cannot be found in the political discourse from the socialist countries.

The political rejection of the quality of life topic is clear-cut expressed by the Moldavian sociologist V. Mocanu (2012), who reflected a more general state of mind for all the Soviet Union republics: "In the Soviet period (1944–1991) in the Moldavian Socialist Soviet Republic, the subject of quality of life was not included in the research programs by the academic institutions because it was considered to be a wrong direction of research by the

communist ideology, harmful for the process of building the communism. . . the subject of quality of life has been banned for research and only criticisms of it were admitted. . .”

The studies published by some personalities with authority developed theoretical justifications for rejecting the Western approach: the quality of life subject actually exists in the Marxist-Leninist theory, but in a different form, which offers more productive directions of research. An influent Soviet specialist, I.V. Bestujev-Lada (1980), wrote that the QOL is not something new. In another form, it already exists in the Marxist-Leninist theory: the “standard of living” provides an evaluation of the material and spiritual needs accomplishment (p. 167). The Soviet specialist offered an alternative paradigm: a complex philosophic construction consisting of the basic concepts of *standard of living*, *quality*, and *way of life*. The proposed theoretical construction was to use a key-synthesizing term, the philosophical-sociological concept of way of life (p. 170). And, actually, by proposing the sociological theme of the quality of life, adds Bestujev-Lada, the situation “complicated because almost immediately after its birth, it became in the West the object of political speculations far from science.”

The Czech sociologist J. Filipec (1974), in his communication at the World Conference of Sociology, Toronto, 1974, largely quoted in Huttman and Liner (1980), stated the Soviet vision of the quality of life: the “new quality of life” is synonymous with the “Marxist-Leninist rationality”; this rationality “cannot result only from knowledge, no matter how advanced they may be, or from an irrational saturation towards the world of the consumption goods; rather, it results from a revolutionary ‘remodelling’ of the conditions which harbour the human life. This presumes a process of creation by the society, using increasingly noble qualities, therefore, increasingly human.” He continues saying that for the socialist countries, the economic objectives are very important, “but when it is to evaluate the quality of life, the social factors go before the economic factors.”

Historical Lag

The launching of QOL theme in the West in the 1970s found the socialist system already in a brutal economic, *political*, *and ideological crisis*, *in a phase of* ***reclosing***, after a decade of ***opening*** in 1960s. One may distinguish three stages in the dynamics of the socialist system, with repercussions in the political, ideological, and scientific orientation.

The **first stage**, until the end of the 1950s: the aggressive imposing the Stalinist Soviet model. The Marxist-Leninist theoretical and ideological paradigm crystallized in the Soviet laboratories made an attempt to take charge of the entire way of thinking. Two distinct, yet complementary, social disciplines were at the core of this paradigm: the ***scientific socialism*** and the ***Marxist-Leninist philosophy***. Both disciplines relied on the Soviet interpretation of the works written by the classics – Marx, Engels, Lenin, and Stalin – plus the party documents of the Communist Soviet Union Party and of the national communist parties. The paradigm of this period stressed the irreducible opposition between the communist conception and the Western thinking. The Marxist-Leninist paradigm had a strictly *normative* orientation: criticism of the capitalist reality which has to be changed by revolution and the communist society to be built. No sociological-type program of empirical investigation of the reality could be built within this paradigm. The empirical investigation of the reality was of no scientific interest, while politically it was considered even to be subversive. It is significant to mention that in the 1950s, sociology was rejected as being a *bourgeois science* which has no place in the communist thinking. This Marxist-Leninist paradigm survived at different degrees and lengths until 1989.

The **second stage**, of the 1960s, was a process of political and ideological ***opening***. Three characteristics are relevant for this stage:

(a) The death of Stalin ignited the pressure for social change. There was an ideological relaxation. The Soviet communist ideology started to be more tolerant and accept some diversity and even reviewed critically some

of the principles which dominated the first stage. The ideological rejection of the Western subjects started to be replaced by the *critical valorization* of some new Western ideas. In Romania, some of the fundamental principles of the communist ideology had been reviewed, a process stimulated by the policy of independence from the Soviet Union. A higher freedom from the Soviet dogmatic theoretical and ideological paradigm took place. A spectacular change in the attitude towards the West one could notice.

(b) The crisis of the communist program put pressure on the development of a realist knowledge of the social reality. The first attempt to open towards the reality was done, however, within the Marxist-Leninist theory, by the intellectuals formed within this paradigm.

We will take as an example the case of Romania, for which we have the necessary documents. At the very beginning of 1960s, groups of philosophers tried to develop empirical investigations on the basis of the Marxist-Leninist paradigm. How can the normative character of the of the Marxist-Leninist paradigm go along with the objective description of reality? They found the following solution: identification, in the actual reality, the **seeds** of the new society, as instance the socialist conscience, the socialist attitude towards work, the responsible communist worker, the promoter of the collective interest and of the party policy within his working environment, and the enthusiastic member of the agricultural cooperatives or the movement of mass innovation, another program started by the Party and which failed quickly and lamentably.

The process of opening towards the empirical investigation of the reality using the Marxist-Leninist paradigm can be detected in the succession of the books written by the same authors at that period (Cernea, 1964; Cernea & Petre, 1967) followed by several books, based on empirical research (Cernea, 1974; Cernea, Micu & Dumitrescu, 1967). For instance, a research developed also by the Romanian Institute of Philosophy in 1963–1964, was based on the following hypothesis: the socialist enterprises represent an advanced furnace for the socialist attitude towards work and of new socialist-type of social relations; we can expect that the advancement in the socialist enterprises would have been transferred to the family life. The hypothesis was to be empirically tested. The empiric analysis was frustrating: it was difficult to detect the "embryos" of the new attitude towards work and family.

However, the Marxist-Leninist paradigm proved to be unable of generating the expected openness towards the investigation of the social reality. The attempts to investigate the reality through the deformed glasses of the Marxist-Leninist theory paradigm failed as mere extensions of the dogmatic vision.

The empirical investigation of the social reality, which got more and more attention during this period, adopted the paradigm of the social sciences, primarily of the sociology. Even during the early 1960s, in most communist countries, sociology had been acknowledged as a legitimate and even necessary science. In an important document of the Romanian Communist Party from 1964, sociology was formally acknowledged as legitimate, and in 1966 sociology was introduced as a university specialization. There was a high interest to resume the sociological tradition of the Bucharest School of Sociology, as well as to assimilate the Western methodology. An influential sociological movement asserted vigorously in 2–3 years, supported by the rehabilitation of the sociologists from the *Bucharest School* of Dimitrie Gusti: Henri H. Stahl, Traian Herseni, Vasile V. Caramelea, and others. Sociology became the carrier of hope for social reform.

A wide field for empirical research of the social reality opened, as well as a more realistic vision of the society. The theoretical-ideological corpus under the label of Marxism-Leninism was challenged by the sociological vision focused on the empirical analysis of the social reality. However, the subject of the sociological research rapidly showed its limits, failing to display the expected global social comprehension. The communist political and ideological system imposed, since the beginning, severe limitations to the sociological subjects.

The potential acceptance of the QOL theme might have been taken place in this *fold* of history. However, such subjects did not yet exist at that time.

(c) In almost all socialist countries, apart from the communist parties which traditionally held monopoly over the social innovation, reform movements started to emerge, supported by different social groups, the sociologists being very active from this point of view.

The **third stage** of evolution of the Soviet socialist system: a *hesitant* political and ideological *reclosing*. After 1968 it became clear that the socialist system had exhausted its resources and hopes for change. The chance that the system's reformation could come from the party leaders had vanished. The climate of political effervescence of the 1960s was replaced progressively by a bleak atmosphere of deterring any attempt for change. The loss of competition with the West was increasingly obvious. The economic boom from the first stage of industrialization exhausted its resources. The 1968 military invasion brutally stopped the attempt for radical change in Czechoslovakia. The year 1968 was not only a Czechoslovak tragedy but also the signal of halting liberalization and starting a process of *closing* of the entire socialist system. But the return to the old political-ideological paradigm could not be complete, rather confused, and some ideological permissiveness was inevitable.

More important, however, in all socialist countries, except Poland, a policy, often brutal, to marginalize the empirical social research was enforced. The political reclosing affected mainly the sociology as potential carrier of a realist view upon society. Sociology was marginalized, in some countries almost to obliteration. In Romania, for instance, in 1977, the sociology departments from the universities have been closed. The empirical sociological researches were no longer supported politically and administratively. Where they were conducted, the case of Romania, they were performed by private initiative, but they almost vanished in the 1980s. In Poland, the government could no longer avoid acknowledging the crisis and could not also use force any more to maintain the social control. Within this unique context, the polish governance asked sociology to make an exact diagnosis of the crisis, hoping to find a solution.

In the 1970s and 1980s, Poland was confronted with a double crisis of the standard of living of the population and of the political legitimacy (Adamski, Pelazynska-Nalecz, & Zabowrowski, 1999). The governing communist party decided to allocate financial resources for a broad research program which started in 1970–1975 and which continued in the 1980s. The projects conducted by the Institute of Philosophy and Sociology of the Polish Academy of Science aimed to "identify the trends of the consumption pattern, of the cultural needs, and of the aspirations of the different social groups," as well as the reaction of the population to the ongoing crisis. The research covered both the subject of the way of life, social structure, and standard of living and only marginally the quality of life, including only some standard indicators of the quality of life.

In Hungary, the specialists promoted the introduction of a complex system of social indicators as instrument of a program promoting the "social modernization" of the society (Andorka & Harcsa, 1990). Significantly, in this synthesis of the proposed program, there was no mention of the concept of the QOL or of its specific indicators. In order to provide an empirical analytical methodology for the way of life, in Hungary, it was launched as a large program to analyze the time budget of the population (Andorka & Falussy, 1982) (see also ▶ Andorka, Rudolf).

The exceptionality of Romania in this matter is analyzed elsewhere (see ▶ Romania, Quality of Life). The Romanian society was confronted too with an aggravating crisis, but this did not generate societal conflicts as it did in Poland. At the surface, the Romanian society showed some stability, but it lacked hopes because of the severe repressive intervention of the governance. The theme of the QOL promoted by some sociologists remained the only form of protest and even a long-term hope. This also was an attempt to put pressure "bottom upwards" for the reform of the system, promoting the values of the quality of life.

In 1978–1982, a group of Romanian sociologists, taking advantage of an ideological confusion and of a particular political tolerance, started with private resources, and using a wide informal social support, a set of theoretical research (books and studies) and empirical research using indicators of the quality of life used in the USA. The empirical research which took place in Romania (Zamfir et al., 1984) seemingly was the only one from the socialist countries with such orientation. It used a sample of 1,804 subjects. The purpose of the research was to validate the set of indicators and to identify the determining factors of the QOL. However, the intention was political too: to put pressure on the socialist system which, instead of making structural reforms, sacrificed the standard of living of the population.

In the socialist countries where sociology remained strong, the QOL subject was accepted as legitimate, but somehow marginally. The stress, in these countries, was on the empirical research of the standard of living and of the people's aspirations while including several subjective QOL indicators (such as in Poland and Hungary).

The *meliorism* involved in the QOL theme was meaningless in a socialist society experiencing a structural crisis. Here, the solution had to be more global: increasing the awareness of the serious problems and pushing towards a radical structural change.

Paradigmatic Incompatibility: Marxist-Leninist Theory and the Quality of Life Paradigm

The attitude of the communist countries towards the Western theme of the QOL was dominated by a hostile irritation. Such an attitude could hardly be explained primarily by a general reticence towards the assimilation of any Western themes which might suggest an ideological-scientific advance compared to the communist system. The explanation must be sought deeper in the structural incompatibility between the Marxist-Leninist theory and the QOL theme. The structural difference of vision is clearly expressed in the way the two paradigms treat the relation between man and his social reality.

Attitude Towards the Social Reality

Both capitalist and socialist paradigms had a critical attitude towards the social reality but different as motivation and extent. For the communist program, *reality from here and now* is less important, being a stage of transition, naturally imperfect. What it is important is the social model to be accomplished in the future. The Western QOL theme also develops a critique of the reality but a *gentle* one: reality is related to the expectations of people, measured by the evaluative perception of the population. Meliorism is characteristic, instead of a radical revolutionary approach.

Whose Quality of Life? Different Paradigms of the Man

In the Western QOL theme, the person taken into consideration is the *existing person*, as he exists *here and now*. The real person, with its needs and aspirations, expresses in the process of evaluating the quality of his/her life. The social reality is related to the existing people.

The paradigm of man in the socialist program is different. Here too, man is the *measure of all things*, but not the man existing *now and here*, but rather the *man to be constructed*, *the new type of man*. The real, existing man, produced by this imperfect society, must be changed. The existing empirical man is not the *legitimate measure of all things*. The communist person proved a very difficult subject to be empirically investigated. It is supposed to exist only as an embryo of the future. But such embryo proved to be impossible to be found in the reality.

Within the context of the communist paradigm, the QOL as it was crystallized in the West is consequently meaningless: the *evaluation of a social reality in transition related to a man who also has to be changed*. The existing man, different from the pattern of the man to be constructed, could not be the framework of reference for the evaluation of the QOL.

Differences in the Strategies for Change

The communist program relies on the strategy of the revolutionary change of the entire social reality, as means of humanization. The Western

QOL theme includes a *melioristic* strategy: punctual improvement of the different components of life by their humanization.

An Alternative Paradigm of the Quality of Life

The observation made by some specialists that the QOL theme essentially developed in the West was not entirely new for the way of thinking in the socialist countries is correct. An alternative paradigm could be identified in the dominant thought from these countries. This paradigm was founded on two themes which partially were overlapping the quality of life theme: the *standard of living* and the *way of life*. The *standard of living* was an important subject in the ideology and science developed in the socialist countries, but not with a descriptive orientation but rather with a normative one. Ultimately, the whole theory and methodology of the standard of living in the socialist paradigm relied on the pattern of a *rational consumption*. The rational/decent standard of living in the communist approach was opposed to the paradigm of the Western *consumerism*. The standard of living was calculated on the basis of this consumption pattern. This model of rational consumption was supposed to be the starting point to plan the national economy. The *way of life* was a favorite subject in the socialist countries. The concept of the *way of life* referred to the *social body of man*, to the way in which his life was organized. In the Marxist-Leninist paradigm, the way of life subject is not descriptive either, but a normative one: the socialist way of life, as way of life of the new man. It did not refer to the way of life of the real man. It was assumed that part of the program of communist construction of the society was the promotion of the socialist way of life, a manifestation of the new man in the spheres of his life: the communist man at work, in his family, in the street. In the 1980s, for instance, in the European communist countries, the way of life was promoted as one of the common research programs.

The development of the paradigm of sociology had an important impact on the topic of the *way of life*. A descriptive-explicative approach started to replace the normative approach. In almost all socialist countries, there is substantial sociological literature analyzing the way of life of the main social categories (workers, peasants, intellectuals, of the deviant groups; impact of industrialization and urbanization on the way of life; differences of age, gender, and social status). Such literature was developed in Poland, Hungary, and Romania, and, most certainly, in all the European socialist countries. The project of promoting the socialist way of life was a *social fact* which had to be identified and described empirically, too. The Polish specialist Andrzej Sicinski (1980, p. 148), in an influent book from that period, next to other styles of life, mentioned the *socialist style of life*, stressing its normative character: it has to be seen rather as a conception of the pattern orienting the human behavior, pattern which we would like to be accomplished in the "developed socialist society."

Summary

The QOL theme developed in West was generally rejected in the communist countries both because of scientific reasons and its political and ideological relevance. Or it was marginally acknowledged. Besides the political suspicions, the most important reason was an incompatibility between the two paradigms of thinking, the society and the human way of life. Due to its prestige, the QOL theme developed in the West was not entirely ignored in the communist countries. It was generally considered as a foreign body, incompatible with the Marxist-Leninist theory, assimilated only by the sociologists having a different paradigmatic orientation. Due to a political context, Romania was a notable exception.

Cross-References

- ▶ Andorka, Rudolf
- ▶ Consumer Society
- ▶ Economic Growth
- ▶ Ideology
- ▶ Institute for Social Research Michigan
- ▶ Need theory
- ▶ Quality of Life

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Communitarianism

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Definition

Communitarianism is a political and social philosophy that aims to counter the individualism underlying Western societies by emphasizing a balance between individual and collective goals and values.

Description

For communitarians, individuals are inherently social beings and cannot be isolated from their social contexts. Thus, from a communitarian perspective, both independence and ▶ interdependence are foundational to ▶ social justice (Sandel, 1998). Because of the interdependent nature of communities, community membership suggests a sense of social responsibility to the community and a focus on the common good (Bell, 1993). Indeed, while there are many strains of communitarianism, concern for the common good is a common thread. Other key tenets of communitarianism include the following:

- ▶ Social justice defined in the context of the common good, so that individual rights are tempered by concern for others

- Active participation in community (Gardner, 1995)
- Shared values (of which a concern for the common good is the most fundamental) (Avineri & de-Shalit, 1992)
- A sense of ▶ solidarity and reciprocity

Communitarianism and Community

Communitarians advocate that communities provide context through which community members define themselves and create unique identities. Communities are valued by communitarians because they facilitate social relationships, rather than serving simply as a means for meeting individual needs. Because of their intrinsic value, communitarians place high value on fostering community (Arai & Pedlar, 2003), particularly through what Borgmann (1992) refers to as *focal practices*, those activities that bring people together in acts of communal creation and celebration, such as festivals, sports, and arts activities. Communitarian thought implies a strongly intertwined social structure and similarly inherent, interdependent relationships among community members.

Communitarianism and Liberalism

Communitarianism emerged as a corollary to the ▶ liberalism and particularly its focus on individual choice and liberty. Philosophically, the debate between liberals and communitarians is a debate about whether individual rights or the common good should form the basis for decisions about fairness and justice (Sandel, 1998). Communitarians suggest that ▶ social justice is based not just on maintaining individual rights but on positioning those rights within the context of the common good, thus balancing individual rights with concern for others. As a result, individuals are inherently bound to others in their communities through mutual obligation to one another and the common good.

Divergence Within the Communitarian Perspective

While there is agreement on the emphasis on the common good as foundational for community (Avineri & de-Shalit, 1992), there are within communitarianism several different threads with different implications for community structures. A key distinction, focused on the implications of communitarianism for politics, is between philosophical and political communitarianism (Arai & Pedlar, 2003). Philosophical communitarians focus on communitarianism as a political philosophy which values the inherently communal nature of humanity and communities as contexts for achieving ▶ social justice. Within philosophical communitarianism, there are further distinctions in terms of the emphases given to different aspects of communitarianism and its relation to other philosophies. ▶ Feminist communitarianism is one such example. While feminists find troubling the tendency for some communitarian scholars to give little attention to inequalities in community membership and power distribution in traditional communities, feminism and communitarianism share common ground as political philosophies that take issue with the liberal ideal of individuals as essentially independent of social relationships and obligations (Weiss, 1995; Young, 1995). Feminist communitarians draw attention to a *politics of difference* (Young, 1995), suggesting that homogeneity and unity are not necessary antecedents to a collective, caring society. Thus, within the broader umbrella of communitarianism, feminist communitarianism focuses on the intersection of class, gender, race, and ▶ sexual orientation within broader experiences of power in communities.

Political communitarians, of which Etzioni (1995, 2004) is the most popular, promote communitarianism as a political ideology focused on nurturing community by upholding specific moral values. The family often receives much emphasis by political communitarians, reflecting the belief that the traditional family unit is the building block of strong communities. Political strains of communitarianism are often normative. They may describe *ideal* family composition, education, or other community structures, thus prescribing a specific method through which community might be achieved or a lens through which it must be viewed (e.g., Barber, 1998; Etzioni, 2004; Galston, 1998).

Cross-References

- ▶ Collectivism
- ▶ Community Participation
- ▶ Feminism
- ▶ Individualism, an Overview
- ▶ Interdependence
- ▶ Liberalism
- ▶ Reciprocity in Exchange
- ▶ Sexual Orientation
- ▶ Social Justice
- ▶ Solidarity

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Communities and Health

- ▶ Healthy Communities

Communities, QoI and Third Places in USA

- ▶ Community Quality of Life and Third Places in the USA

Communities, Supportive

- ▶ Care, Residential

Community

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Definition

The concept of community generally has two referents that are important to the study of the quality of life – geographically defined communities ranging from small neighborhood units to towns and cities and communities formed through interaction but dispersed and connected through common interests or some defining unit such as ethnicity or lifestyle. The second of these includes "virtual communities" connected through the Internet and social media.

Description

The concept of community deserves a prime location in the quality of life literature. The individual's quality of life often is reflected in a "global QOL concept" that sums up

assessments or objective indicators across a variety of domains. In the past couple decades, health has moved to the forefront of the QOL literature, and remaining healthy is the essential first step to attaining a high quality of life. Health is on the first rung of the QOL of life ladder if we use Maslow's (1954) hierarchy of needs pyramid as a blueprint for an assessment across domains. We begin with physiological needs at the bottom and then move up to safety, belongingness, and love and then esteem, aesthetic, and cognitive needs and finally self-actualization at the top. It is difficult to envision how an individual's QOL at each level is not bound up to some extent with the "community" in which one lives, whether that is the geographic community or another defined in terms of interdependence in some other manner. Thus, for example, a healthy diet depends not only on personal family resources and food choices but also the availability of good options in the community. The "local food movement" is an example of this. Safety, even for those in nonfunctional family units, is improved by living in safe neighborhoods –"it takes a village," and our need for affiliation requires communication and interaction provided by community. Even aesthetic needs are likely to be satisfied more readily in communities with abundant cultural resources. At the top, self-actualization is seldom achieved in isolation, whether it is fulfillment at work, in the neighborhood, or in some virtual community.

The concept of community has a lengthy history. Hillery's (1955) explication of the concept and examination of its referents more than a half century ago still stands as an excellent beginning point, with a taxonomy that breaks the definitions down into those with a geographic basis and those that see communication as the defining glue bringing and holding people together. While communication is also needed for geographic communities, geography is not required for other communities, for example, ethnic communities or lifestyle groups.

Urban scholars and those interested in geographic communities have joined the enduring group of rural sociologists and others examining how people remain attached to their geographic towns and maintain a "▶ sense of place." Despite the declining resources put into government programs targeting urban centers, we still have many scholars interested in the "urban problems" affecting people's quality of life, and thus, community still matters, whether we study QOL as a "society" or "social" issue. Almost every issue occurs within a context, and that context if examined is a community. Assessing the quality of life at the community level, we need to pay some attention to the "sense of community" developed through interaction with others. Examining just the literature focusing on "geographic-based" communities still leaves us with some problematic boundary issues. Jeffres (2002, pp. 6–7), focusing on ▶ neighborhoods, updated the Hillery taxonomy to look at natural community, community of limited liability, social bloc, organizationally dependent community, and related concepts. In addition to the geographic anchor, communication in some form is a required, defining concept, but other aspect of interdependence allows for additional distinctions, for example, ethnic communities. Different aspects of the quality of life come to the forefront depending on the defining distinctions; thus, the comfort of a homogeneous ethnic safety net in those neighborhoods enhances both affiliative and safety needs and the accompanying quality of life.

Non-geographic communities provide meaning in the lives of many people, whether that interdependence is a shared lifestyle (e.g., gay communities), shared heritage (e.g., ethnic communities), or goal-directed activity (e.g., self-help groups, service organizations, and work groups). This encyclopedia is littered with referents to such groups or "communities." However, while communication is the activity that brings these communities together, today the growth of the Internet, social media, and communication technologies is changing how communication both defines and supports these (see, e.g., Carter, 2005, for a discussion of relationships in cyberspace). Facebook "networks" represent communities constructed with invitations and acceptances, and, while many personal networks are largely collections of relatives and friends, some professionally or work-defined networks

represent communities with idiosyncratic measures of interdependence. An additional step is taken when we examine the "quality of virtual life" (see Novak, 2011).

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"Community Accounts": Newfoundland and Labrador, Canada

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Synonyms

Community infrastructure mapping system (CIMS)

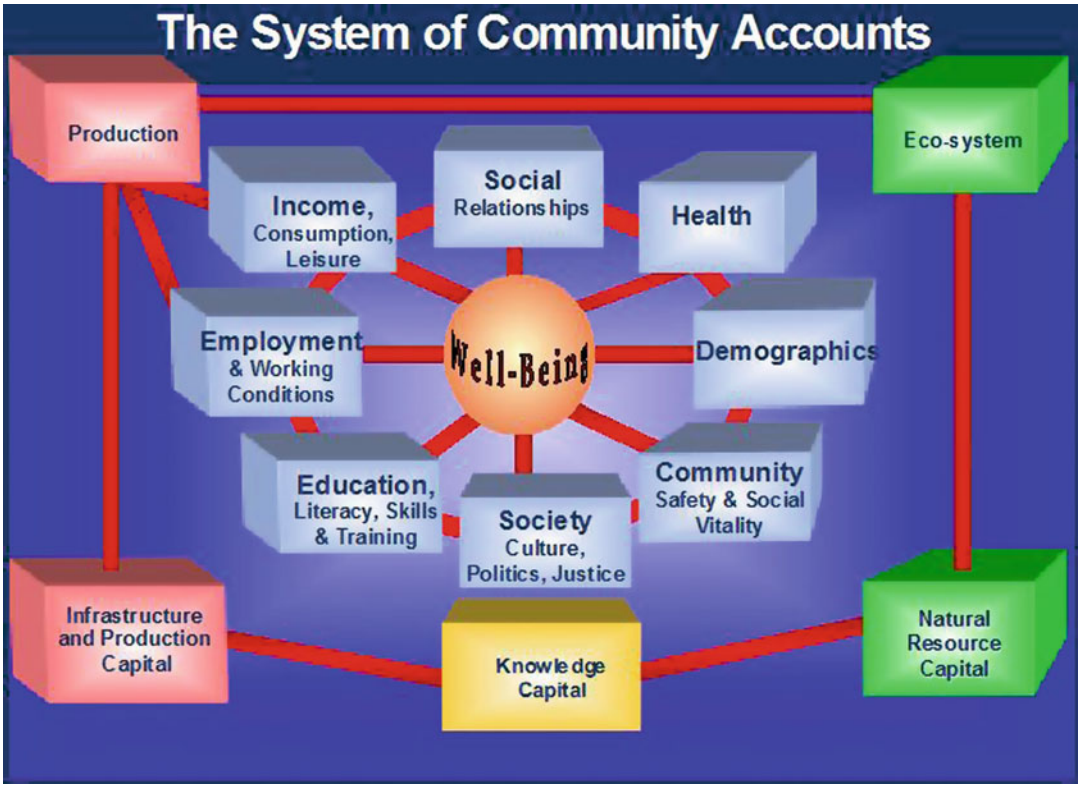
Definition

The System of Community Accounts (SCA) is a standardized, centralized, integrated source of publicly available social and economic data (www.communityaccounts.ca). The SCA presents data at the community level and neighborhood level but is equipped to aggregate to sub-provincial administrative regions, for example, hospital boards and school boards or municipalities, as well as up to the provincial level. Aggregate provincial-level data, as well as limited international data sets, are also incorporated. Development of the SCA by the Newfoundland and Labrador Statistics Agency in conjunction with conceptual architect, Dr. Douglas May commenced in the late 1990s, guided by a vision of what ► social progress meant for the people and communities of the province.

The SCA is a social accounting system. But, unlike the best known other social accounting system, the System of National Accounts (SNA), which focuses on production and presents aggregate statistics such as gross domestic project (GDP), the SCA goes beyond GDP. It has both individual and collective well-being as its nexus. It is true however that the SCA incorporates much of the SNA in that it recognizes that material and economic well-being depends on the conversion of the service flows from the various forms of capital into useful outputs for consumption and trade by residents. Consistent with recent criticisms of the SNA by Stiglitz, Sen, and Fitoussi (2009), the System of Community Accounts does provide indicators relating to ► poverty and the distribution of income as well as ► sustainability.

Description

In the late 1990s, the Canadian province of Newfoundland and Labrador was undergoing profound social and economic changes as a result of the closure of its groundfishery and the restructuring of its economy (Ommer & Team, 2007). Recognizing the value in an alternative approach to change, the government of the province committed itself to a common social vision that went beyond measuring economic progress and focused on communities, regions, and people. With the knowledge that evidence-based decision-making was essential to implementing successful programs and policies, the government recognized that achieving this vision required an integrated approach supported



"Community Accounts": Newfoundland and Labrador, Canada, Fig. 1 Community accounts structure (Source: Department of Finance Government of Newfoundland and Labrador)

by a centralized source of quality data. The Community Accounts system was developed in anticipation of these demands and in recognition of the role that the measurement of "well-being" would play in meeting them.

The SCA can be conceptualized into two distinct categories: the first centers on the nexus of individual well-being, that is, the ▶ quality of life of the individual. While the SCA is nested in the vision that well-being "emphasizes healthy, educated, prosperous, and socially complete individuals that feel empowered and supported to making full use of their innate potential" (Hollett, Giles, & May, 2008, p. 482), it recognizes that individual and collective well-being are intertwined via larger social and cultural processes, as well as community and societal institutions (see Hollett et al., 2008; Wilkinson, 1991). The SCA embodies this interplay by specifying eight well-being domains related to life activities: social relationships; ▶ health; demographics; community safety and social vitality; society, culture, politics, and ▶ justice; ▶ education, ▶ literacy, skills, and training; employment and working conditions; and finally, income, ▶ consumption, and ▶ leisure. A ninth domain that affects well-being, the quality of the environment, is also included (Fig. 1). To a very large extent, these domains reflect the social vision already noted as well as conceptualizations of well-being by classical economists.

The second distinct category of the SCA relates to the production accounts and to the SNA. In this framework, the service flows from various types of capital provide the inputs used to produce outputs that can be either consumed or traded. Sustainability, in a material sense, depends upon these capital stocks coupled with technological change incorporated in knowledge capital. In Fig. 1, the red "connector pipes"

illustrate that the various domains are interdependently related to one another and therefore the direction of causation is indeterminate. The implication of this feature is that the strength of the relationship would have to be estimated using more generalized statistical techniques such as generalized logit models.

The SCA provides the government of Newfoundland and Labrador and the general public with a reliable source of neighbourhood community, regional, provincial, national, and international data. The online data retrieval system enables locating, sharing, and exchanging information related to the province and its people. Data are available for 443 communities, 223 neighbourhoods, 80 census consolidated subdivisions (local areas), 20 economic development zones, and the province. Information can also be retrieved at the level of Rural Secretariat Regions, health authorities, school districts, and Human Resources and Skills Development Canada Regions. The system is based on standardized Statistics Canada geography. It has been adopted in Prince Edward Island and Nora Scotia. Two other province are in the final stages of considering adoption of the system.

The system's data accounts and its companion set of analytical tools provide citizens and policy makers with key social, economic, demographic, and health data that would otherwise be unavailable, too costly to obtain, and too time consuming to retrieve and compile. Many of the "aggregate" community indicators are compiled using individual and, therefore, confidential administrative tax, health, and education records which are *not* accessible to researchers or to the general public but are accessible to the Newfoundland and Labrador Statistics Agency under the provincial Statistics Act. Following the guidelines of Statistics Canada, any published data maintain individual and family confidentiality.

User-friendly ▶ data analysis tools and visualization aids are available online and are located within four main activity areas on the SCA website. These areas include profiles, tables and charts, maps, and well-being and indicators (Fig. 2). The profiles area is the most accessed section of the site. Here, users can view profiles on communities/neighborhoods and other geographies of their choice. These profiles, which are also available in French and for the seniors population (55+ and 65+), provide a brief summary of key social and economic information from each of the accounts in a simple accessible format and include illustrative graphs and charts. The tables and charts area provide users with several analytical possibilities. Tables can be generated for a wide range of data and can be viewed as in a simple standard format or as a comparative table based upon user specifications. The maps area of the site contains over 1,000 thematic and geographic PDF data maps, as well as the Community Infrastructure Mapping System (CIMS), which interactively demonstrates key service and infrastructure locations on select geographies using the Google Map interface.

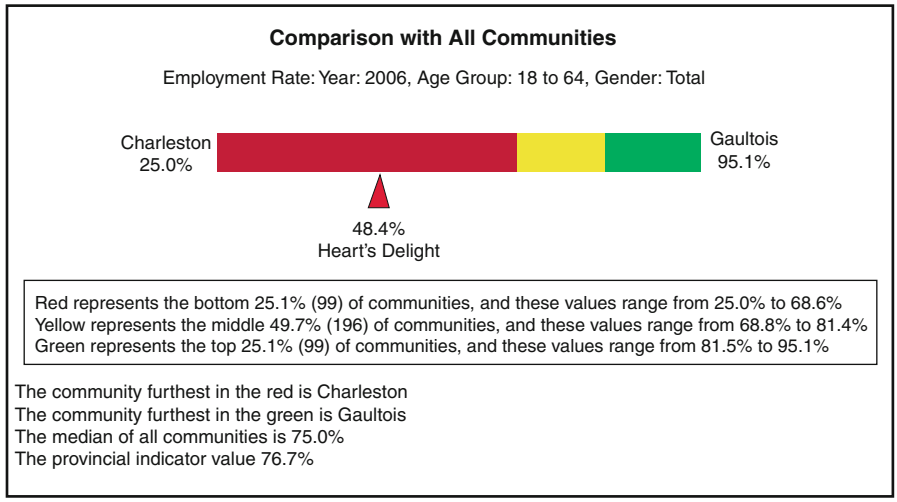
As a cornerstone of the site and the system itself, the well-being and indicators area features selected indicators for each of the accounts, calculates these values as relative rates, and provides graphics that show rate comparisons across geographies. "Cigar" diagrams (Fig. 3) use a "traffic light" scheme to illustrate when a community falls within the top or bottom quartile with respect to other communities (i.e., red means it is well below, yellow means somewhat below, and green means equal to or better than the average); this area therefore allows users to visually see how their neighborhoods, communities, regions, etc. fare comparatively.

One of the main features of this, portion of the website is its well-being indicator set. Community Accounts currently have a set of 18 objective and ▶ subjective indicators designed to demonstrate levels of well-being and to rank these scores comparatively. "Well-being summary" tables provide a crude *aggregate* measure of a community's social progress and general quality of life relative to other communities. The resulting aggregate measure has aided community planners and service providers in determining which neighborhoods are generally falling behind others in terms of relative social progress. It should be noted that such indicators

"Community Accounts": Newfoundland and Labrador, Canada, Fig. 2 SCA tools and activity areas

are a first-response test leading to further analyses. The well-being summary tables have also served to make service providers aware of the interdependency among areas of service. For example, health-care providers can easily see that those most in need of service come from poorer socioeconomic groups with lower levels of formal education. As such, models such as the well-known population-health model take on a readily seen validity at the community and neighborhood level. Another aspect of the summary table is that it also illustrates "best-case" scenarios encouraging researchers to investigate why "twin" communities (i.e., they are geographically close to one another) can be so different.

Of the many analytical aids, one of the most interesting in our view is the "determinants of well-being" model based on cross-sectional data from our own provincial survey. This model uses multinomial logit modeling to determine the quality of life for a "representative" individual based on the various domains and age/gender/area of



"Community Accounts": Newfoundland and Labrador, Canada, Fig. 3 Cigar diagram example (Source: Department of Finance Government of Newfoundland and Labrador)

residency. The model can be used to operationalize the economic concept of "equivalent variation" to monetize various qualitative characteristics. This concept is applied in ▶ cost-benefit analysis to monetize the benefits associated with consumer surplus when one knows the demand curve for the specific output. Generally the demand curve would not be known for segments of the population. For governments interested in estimating the monetary value of specific policy interventions in their contribution to social progress, this methodology represents an exciting path forward in applied ▶ welfare economics.

This measurement of individual and collective well-being is increasingly a preferred means to gauge both the social and economic health of populations and communities even though such a task is difficult given its subjective nature and alternating units of analyses (i.e., individual and community). Fueled by international legitimization to go beyond GDP (Commission on the Measurement of Economic Performance and Social Progress, Stiglitz, Sen, & Fitoussi, 2009), efforts to embrace well-being measurement as a policy directive include the Organisation for Economic Co-operation and Development (OECD) ▶ Better Life Index and the United Nations' Human Development Index. In Canada, the ▶ Canadian Index of Well-being has been particularly instrumental in national efforts to incorporate well-being, especially given that improvements in quality of life have not kept pace with GDP in the country (see Romanow, 2012). A similar trend has been noted in other countries across the world (see Bruni & Porta, 2005).

Development of the System of Community Accounts predates these efforts. It was the first of its kind in Canada and has been recognized by national and international organizations such as the Institute of Public Administration of Canada and the United Nations as a true innovation, designed to make government better and governing easier. Unlike most other systems, it is able to implement a "bottom-up" approach using administrative data on the individual and the family and aggregating up through neighborhoods and communities through various regions to the provincial level. Other accounting systems work top-down beginning at the national level with some subnational data. These systems may even have examples of municipal data but unlike our system, they do not have universal coverage of all of the communities and neighborhoods within the state or province.

Much work needs to be done. While administrative data are an important source of

information, they are not our only source. Work has commenced on generating more community-driven data and methodology, particularly in the arena of culture and community where a gap in information exists. Currently, the NLSA has developed a "community-based" cultural website at www.culturalheritageresources.ca for the community of Branch, located on the southwestern portion of Newfoundland's Avalon Peninsula. Consistent with our citizen-based and community-based approaches, a data management system has been developed which permits the community to insert its own data including videos and stories. This is an amalgamation of YouTube and Wikipedia at the community level. The result is that citizens relate to and feel responsible for the data rather than detached from it. Furthermore, they believe that "data" can represent them rather than be used against them.

As with all innovation in an area of investigation, convergence occurs. The areas of social progress, quality of life, and well-being are no exception. The Australians are working on the Australian National Development Index (ANDI); the Bhutanese have the Gross National Happiness Index which has been in place since the early 1970s. At a national level, Canadians have the Canadian Index of Well-being, noted previously. In the UK, the Happiness Index, fueled by national surveys on well-being, now exists. Through its Statistics Directorate, the OECD has and is showing valuable leadership for these national efforts. As for convergence, compare the framework described above for the System of Community Accounts with the OECD's measuring progress and well-being (www.oecd.org/measuring-progress). The convergence is remarkable but perhaps more remarkable is the progress in social accounting frameworks in this area in little more than a decade.

Cross-References

- ▶ Aristotle
- ▶ Plato
- ▶ Well-being and Progress Measurement
- ▶ Well-being of Nations

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Community Adaptation

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Synonyms

Community-based support

Definition

Community adaptation starts from the assumption that individuals do not always need support outside the community (e.g., residential treatment setting) in order to achieve a good quality of life (QoL).

Description

In the last two decades, there has been a tremendous change in the way care and support are provided to people with mental disorders and long-term care needs. This is mainly the result of the deinstitutionalization process in mental health care, including a focus to more ▶ community-based support (Katschnig, 2006). A shift from a strict medical model of care has been observed towards a support model that gives a central position to the clients' own perspective and opinion (subjective component) as the starting point of treatment. ▶ Empowerment, control, and participation of clients are central concepts in this approach. A comparable evolution has been noticed in the field of disability studies (Cummins, 2005). From the 1980s, QoL emerged as an important concept in the support of individuals with intellectual disabilities, with a "fulfilling citizenship" as the ultimate goal. This change was mainly based on (1) the limited impact of a purely technocratic approach of treatment, (2) more attention to community-based support, and (3) the rise of consumer empowerment with a focus on person-centered planning (Schalock et al., 2002).

Starting from the assumption that it is a community's duty to include and support the most vulnerable IN society strongly connects with the Universal Declaration of Human Rights (1948), which, among others, contains the right of a certain standard of QoL for all people, involving community integration and ▶ social inclusion (Broekaert, Autrique, Vanderplasschen, & Colpaert, 2010). This way of thinking fits very well in postmodern times, where attention is given to a poststructuralist point of view that questions societal structures that lead to the exclusion and marginalization of certain groups of people (e.g., individuals living with mental illnesses, disabilities) (Broekaert, D'Oosterlinck, Van Hove, & Bayliss, 2004; Foucault, 1977). Starting from a philosophy that no absolute truth exists, enforcing a standard of QoL, without attention for an individual's own expectations and values in life, is undesirable. Due to the subjective character of QoL, a community needs to abandon the strict standard of values/life objectives, typical for our modern, alienating society, and create space for another way of approaching people, with attention for their own, personal truth (Carr & Higginson, 2001).

In what follows current evolutions in substance abuse treatment will be used as an example to illustrate this shift to more community-based support. Little by little this way of thinking also finds acceptance in the field of substance abuse treatment. However, attention for the concept QoL is rather limited, and a modern deficit and problem-oriented approach is still very prominent, mainly in the abstinence-oriented treatment. In this treatment approach, there is a strong focus on values and norms based on an abstinent life style. Harm reduction on the other hand is characterized by a humanistic, nonjudgmental treatment approach, with respect for the autonomy and self-determination of individuals using drugs. It emphasizes their rights for health care and tries to support the social inclusion of clients by supporting them in their natural environment (Brocato & Wagner, 2003; Denning, 2001). The primary goal of harm reduction is not to combat the use of drugs, but to diminish the harm associated with drug use. Substitution treatment, mainly extramural, is one of the pillars of the harm reduction approach. Methadone – a long-acting opiate agonist that causes physiological stability, eliminates opiate withdrawal symptoms, and blocks the euphoric effects of heroin use – has slowly become an important mainstay in substitution treatment and a key element of the establishment of harm reduction initiatives in the last decade (Mattick, Breen, Kimber, & Davoli, 2009). Providing methadone is an evidence-based manner in which the community tries to support opiate-dependent individuals in their daily life. From this perspective methadone can be seen as a form of community adaptation to deal with the existence of human beings suffering from opiate dependence. It can be seen as a tool to improve the growth and development of a human being (both at the individual and the societal level), rather than a substitute that prevents individuals from using drugs.

There is no value judgment about the use of drugs in the society, but the focus is on the improvement of an individual's overall well-being. However, one of the main objectives of providing methadone was to minimize the harms for society (e.g., reduction of risk behavior and drug-related crime), and one can question what the impact of this treatment form is on the daily life and the integration in the community of opiate-dependent individuals.

To study the impact of methadone treatment on individuals' daily living, in-depth interviews were organized with 25 opiate-dependent individuals, based on purposive sampling. Thematic analysis was applied to analyze the data. This study highlights the ambivalent influence of methadone on important components of a good life (e.g., having social relationships, having a meaningful life) (De Maeyer et al., 2011). Methadone was perceived as a transitional phase (in their life) by the majority of participants, which helped them by creating the necessary space and time needed to obtain some of the important components of a good QoL. On the other hand, methadone also turned out to have a negative impact on opiate-dependent individuals' QoL, given the social and practical consequences associated with following methadone treatment (Holt, 2007). Feelings of dependence and ▶ stigmatization often jeopardize opiate-dependent individuals' overall QoL (Ahern, Stuber, & Galea, 2007). Experienced feelings of shame and stigmatization (e.g., based on negative stereotypes) can set a person apart from others, negatively affecting opiate users' social integration as a whole and should therefore not be underestimated (Simmonds & Coomber, 2009). According to our findings, research suggests that it is mainly the social consequences of a chronic disease and the impact on individuals' daily living that affect their QoL, rather than the severity of the illness itself (symptom-related) (Kilian, Matschinger, & Angermeyer, 2001), again urging for the development of a social capital, broader than a drug-using community, with attention to aspects as stigma and discrimination. Strengthening clients' social capital and enhancing empowerment should be a priority in treatment, in order to expand a person's informal network and enlarge the possibilities of self-help. These findings illustrate that methadone can be a useful tool in supporting opiate-dependent individuals in their daily life in the community, but attention should be given to the social consequences of this treatment form. A holistic paradigm when talking about QoL, giving attention to the individual as a whole in interaction with his or her environment, is inevitable (Laudet, Becker, & White, 2009).

However, clinical practice can only influence a restricted number of factors that can contribute to a better QoL, but a number of factors that affect the QoL of people living in socially vulnerable situations (e.g., community stigma) should be dealt with by the broader society (e.g., mass media, policy) (Schalock et al., 2002; Kilian & Angermeyer, 1999). If the community wants to enhance the QoL of opiate-dependent individuals, it will be important to realize that opiate dependence is not an isolated problem of a unique individual, apart from the social context in which they live. Quality of life of individuals (in vulnerable situations) is strongly linked with the connectedness – or the lack of it – with the community and society as a whole, revealing the need to strive for an integrated support approach in everyday life and inclusion of the most vulnerable. This is also retrieved in the disability studies, where a disability is considered as a result of social injustice (societal component) with attention for the intrinsic relationship between a person and the community, rather than an individualized problem (Broekaert et al., 2004). Therefore, one should not underestimate the environmental and contextual components that interact with an individual's QoL (e.g., lack of supportive network, loss of identity) (Schalock et al., 2002). Community adaptation needs to go further than normalization of individuals based on the norms and values of society, but should lead to participation, belonging, and emancipation of all human beings. When starting from this perspective, differences and diversity are seen as a contribution to society as a whole.

Cross-References

- Addiction, An Overview
- Community Support
- Social Exclusion
- Social Inclusion
- Social Support
- Stigmatization
- Strengths-based Approaches

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Community Adaptation, Arctic

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Synonyms

Ability to cope; Arctic adjustment; Building adaptive capacity; Resilient communities

Definition

Vulnerability refers to the manner and degree to which a community is susceptible to conditions that directly or indirectly affect the well-being or sustainability of the community. This includes the sensitivity of the ecosystem of which the community is part or on which the community depends. Use of this term does not presume that communities are particularly vulnerable – some

may have relatively few or no vulnerabilities. Vulnerability is a function of both exposure and sensitivity.

Adaptive capacity is closely related to resilience and reflects an individual's or community's ability to cope with, adjust to, or recover from past stresses and its ability to anticipate and plan for future change.

Description

The Arctic is one of the world's most sparsely populated regions because of its extreme climatic conditions. Communities are dispersed throughout the Arctic, but most of them are situated in the southern parts. These communities are experiencing some of the world's most rapid changes in environmental and socioeconomic conditions, documented by instrumental records and local observations (ACIA, 2005; Gearheard et al., 2006; Hovelsrud & Smit, 2010). Changing conditions are nothing new to inhabitants in Arctic communities. Living on the margins on what is possible, Arctic peoples have had to adapt to major annual and interannual fluctuations in climate and resource conditions. Arctic communities therefore possess a large capacity for adaptation (ACIA, 2005; Hovelsrud & Smit, 2010). Arctic communities range from mixed economy cities with several hundred thousand inhabitants to small mixed cash-hunting and fishing subsistence indigenous communities of less than a hundred inhabitants. The majority of Arctic inhabitants now live in cities. Traditionally Arctic communities have relied on abundant and accessible natural resources, but the last fifty years have seen a shift to increased industry and private and public service dependence.

Projected climate changes for the Arctic include an increase in temperature and precipitation, an increase in hazardous weather conditions, and changes in the cryosphere (Intergovernmental Panel on Climate Change IPCC, 2007). The sea ice is shrinking, glaciers are retreating, and permafrost is thawing (AMAP, 2011). The sea level is also projected to rise. This in combination with thawing permafrost leads to increased coastal erosion. The changing climate has and will therefore have implications for the communities in the Arctic. Traditional activities tied to the sea ice, such as hunting and fishing, are already affecting particularly indigenous groups in Greenland and Arctic Canada (Krupnik et al., 2010; Hovelsrud et al., 2011). The melting sea ice also opens new opportunities for shipping and offshore oil and gas exploration, activities which will have large impact for Arctic communities. Thawing permafrost raises concerns for infrastructure, such as buildings, roads, and electricity grids, but currently few damages can explicitly be attributed to climate change (Hovelsrud et al., 2011). Increased temperature contributes to altering animal and vegetation distribution and dynamics. The tree line is moving northwards, resulting in increased tree, shrub, and bush coverage in tundra zones, which has major implications for ecosystems and livelihoods (ACIA, 2005).

Considerable natural resource endowment has ensured the viability of Arctic communities in the past. As the oceans warm the distribution of commercially important species, such as herring and cod, is changing. The composition of Arctic marine ecosystems will also change as warmer temperature induces southern species to establish themselves in Arctic waters. Fishery-dependent communities may be heavily affected by localized stock changes, but overall climate change fisheries effects are expected to have a minimal economic impact at the national level (ACIA, 2005). Fisheries management is found to have a larger impact upon fish stocks than projected climate change (ACIA, 2005; Eide & Heen, 2002). Forestry and farming industries are both projected to benefit from improved growing conditions and a lengthened season, but are vulnerable to invasive species, such as increases in weed and pest abundance, as well as a higher frequency of forest fires. Increased temperatures might also lead to ecosystem shifts which further reduce biodiversity (IPCC, 2007). This has unknown consequences for agriculture and farming.

Indigenous groups throughout the Arctic are reliant upon traditional activities such as hunting and fishing. The resources that many of these peoples exploit are expected to be heavily

affected by climate change, thus increasing community exposure and sensitivity. These communities have proven resilient in the past and are not passive actors in the face of change. However, the rate of socioeconomic change that they are now experiencing, such as reduced transference of traditional knowledge between generations and out-migration, in combination with climate change effects, weakens the foundations for the traditional way of life in many indigenous communities (Hovelsrud et al., 2010).

Climate change occurs within a wider context of challenging social, institutional, and economic conditions that also require adaptation. The conditions might also affect the capacity or capability of communities to adapt. Concerns have been raised regarding resource accessibility, allocation and extraction policy, limited economic opportunity and market access constraints, demographics, attitudes and perceptions of change, infrastructure, threats to cultural identity and well-being, transfer of local/traditional knowledge, economic and livelihood flexibility, and enabling institutions. Some of these are broad and crosscutting policy and management conditions, while others are more particular and highly context dependent (Hovelsrud, Andrachuk, & Smit, White, 2010b).

Cross-References

- ▶ Arctic Social Indicators (ASI)
- ▶ Climate Change, Arctic
- ▶ Globalization, Arctic
- ▶ Human Development, Arctic
- ▶ Material Well-being, Arctic
- ▶ Migration, Arctic
- ▶ Subsistence in the Arctic

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Community Attachment

▶ Housing and Aging

Community Building

▶ Index of Arts as Community Builders

Community Capacity Building

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Synonyms

CCB; Community capacity domains; Community empowerment

Definition

Community capacity building can be broadly defined as the "increase in community group's" abilities to define, assess, analyze, and act on health (or any other) concerns of importance to their members (Labonte & Laverack, 2001a, p. 114). Community capacity building is also viewed as (Goodman et al., 1998) a process that increases the assets and attributes that a community is able to draw upon. Community capacity building is not specific to a particular locality, nor of the individuals or groups within it, but of the interactions between both. Interest in community capacity building as a strategy for sustainable skills, resources, and commitments in various settings has developed because of the requirement to prolong project gains (Gibbon, Labonte, & Laverack, 2002). These qualities exist in relation to specific people and groups, specific issues and concerns, and specific activities or projects. Community empowerment and community capacity building overlap closely as forms of social organization and mobilization that seek to address the inequalities in peoples' lives (Laverack, 2007, p. 19). Community capacity building is often the means by which the outcome of increased community empowerment can be achieved. Both community capacity building and empowerment are achieved through systematically building knowledge, skills, and competencies at a local level.

Description

One of the advances in recent years around our thinking of community capacity building has been the ability to "unpack" this concept into the areas of influence that significantly contribute to its development as a process. In particular, the organizational characteristics that influence community capacity building provide a useful means to build and measure this concept (Labonte & Laverack, 2001b). The "capacity domains" represent those aspects of the process of community capacity that allow individuals and groups to better organize and mobilize themselves toward gaining greater control of their lives. The "capacity domains" are robust and collectively capture the essential qualities of a capable community. The "capacity domains" provide a predetermined focus to build community capacity to improve stakeholder participation, develop local leadership, build organizational structures, increase problem assessment capacities, enhance stakeholder ability to "ask why," improve resource mobilization, strengthen links to other organizations and people, create an equitable relationship with outside agents, and increase stakeholder control over program management. The "capacity domains" also provide a link between the interpersonal elements of community capacity such as individual control and community cohesiveness and the contextual elements such as the political and economic circumstances (Laverack, 2001). The existence of functional leadership, the established community structures, the level of participation, and the ability to mobilize resources are indicative of both a community with strong organizational and social abilities.

Building Community Capacity

The approach to building community capacity is intended to be an empowering experience for communities and involves the use of a participatory "tool" in conjunction with the nine "capacity domains" to enable people to better organize themselves and to critically reflect on their individual and collective circumstances. Importantly, it enables people to strategically plan for actions to resolve their circumstances, to evaluate, and to visually represent this process as outcomes. Rather than being a substitute for project objectives, community capacity creates a separate set of goals that run "parallel" to the specific purpose of a project. The "tool" is typically implemented to build community capacity as a workshop.

Phase 1: Preparation

A period of observation and discussion is important to adapt the "tool" to the social and cultural requirements of the participants, for example, the use of a working definition of community

capacity building can provide all participants with a more mutual understanding of the concept in which they are involved and toward which they are expected to contribute.

Phase 2: A Measurement of Each Domain

Using the nine domains, the participants of the workshop firstly make a measurement of their community's capacity. To do this, they are provided with five generic statements for each domain, each written on a separate sheet. The five statements represent a description of the various levels of capacity related to that domain. Taking one domain at a time, the participants are asked to select the statement which most closely describes the present situation in their community. The statements are not numbered or marked in any way, and each is read out loud by the participants to encourage group discussion. The descriptions may be amended by the participants, or a new description may be provided to describe the situation for a particular domain. In this way, the participants make their own measurement for each domain by comparing their experiences and opinions.

Recording the Reasons for the Measurement

It is important that the participants record the reasons why the measurement for the domain has been made. First, it assists other people who make the remeasurement and who need to take the previous record into account. Second, it provides some defensible or empirically observable criteria for the selection. The "reasons why" include verifiable examples of the actual experiences of the participants taken from their community and illustrate the reasoning behind the selection of the statement.

Phase 3: Developing a Strategic Plan for Community Capacity

The measurement in Phase 2 is in itself insufficient to build capacity as this information must also be transformed into actions. This is achieved by building community capacity through strategic planning for positive changes in each of the nine "domains." The strategic planning for each domain consists of three simple steps: (1) a discussion on how to improve the present situation, (2) the development of a strategy to improve upon the present situation, and (3) the identification of any necessary resources.

A Discussion on How to Improve the Present Situation

Following the measurement of each domain, the participants will be asked to decide as a group how this situation can be improved in their community. If more than one statement has been selected, the participants should consider how to improve each situation. The purpose is to identify the broader approaches that will improve the present situation and provide a lead into a more detailed strategy. If the participants decide that the present situation does not require any improvement, no strategy will be developed for that particular domain.

Developing a Strategy to Improve the Present Situation

The participants are next asked to consider how, in practice, the measurement can be improved. The participants develop a more detailed strategy based on the broader approaches that have already been identified by identifying specific activities, sequencing activities into the correct order to make an improvement, setting a realistic time frame including any significant benchmarks or targets, and assigning individual responsibilities to complete each activity within the program time frame.

Assessing the Necessary Resources

The participants assess the internal and external resources that are necessary and available to improve the present situation, for example, technical assistance, equipment, finance, and training. This includes a review of locally available resources and any resources that can be provided by an outside agent.

Several authors have used visual representations to compare changes in community capacity building, for example, Roughan (1986) developed a wheel configuration and used rating scales to measure three areas: ▶ personal growth, material growth, and social growth for village development

in the Solomon Islands. The rating scale had ten points that radiated outward like the spokes of a wheel for each indicator of the three growth areas. Each scale was plotted and joined together following a measurement by the village members and provided a visual representation of growth and development. However, the approach did not promote strategic planning and used a total of 18 complex, interrelated indicators such as equity and solidarity to measure village development. These ethnocentric and complex indicators were difficult to conceptualize, especially in a cross-cultural context, by the participants which introduce some ambiguity into the measurement. Bjaras, Haglund, and Rifkin (1991) in Sweden were the first commentators on the use of the "spider web" configuration for the visual representation of community participation. However, the approach was not designed by the researchers to be carried out as a self-evaluation by the community or to promote strategic planning. Instead, it was used as a checklist by an external agent to measure community participation, a process that does not necessarily promote self-improvement. These early experiences of evaluation have provided the basis for the subsequent development of a method to visually represent community capacity building. As discussed in Phase 2 of the "tool," a set of descriptors are identified for each domain and a rank assigned for each descriptor from 1 (low) to 5 (high). This qualitative evaluation of each domain then provides a set of rankings which can be quantified and plotted, in this case, onto a spider web configuration. Different stakeholders in the same program use the interpretation of this visual representation to make comparisons of the domains at different times in the life of the program. The spider web configuration offers a visual presentation that can be understood by all the stakeholders (Laverack, 2006).

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Community Capacity Domains

▶ Community Capacity Building

Community Care

▶ Care, Long-Term
▶ Community-Based Care

Community Cohesion

▶ Measures of Social Cohesion

Community Context

▶ Neighborhood Characteristics and Children's Safety

Community Deliberation

▶ Community Participation

Community Design

▶ Urban Design

Community Development

▶ Community Participation
▶ Community-Based Planning

Community Disadvantage

▶ Neighborhood Disorder

Community Diversity

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Synonyms

Community heterogeneity; Community multiplicity; Community plurality

Definition

Diversity is an inherent characteristic of communities, internally as well as externally considering the multiplicity of possible communities.

Diversity refers to different identities, being individuals or subgroups on the inside of the community or of the community as a collective identity that differentiates it from other collectives.

Description

The most visible among these identities and probably the most moving is ethnic identity but not the only one. Different social attributions imply different identities (gender, age, religion, etc.) that can become more visible according to the circumstances or if that element is assumed by the subjects as more important than others.

Consideration of this identity element allows us to associate the community to the construction of boundaries that help to delimitate a social space with an agreement about rules and accepted behavior and that offer the necessary trust to generate interchanges among subjects.

This identity construction presumes symbols, and in that sense, Cohen (1985) considers the community as a symbolic construction. The vagueness of the symbols makes them effective means of agglutination, establishing the identity of the community. Mercado Maldonado and Hernández Oliva (2010) claim that collective identity is a subjective construction, expressed in terms of a "we" as opposed to others, which points of departure are the cultural elements selected by the community.

Consideration of culture is central to the first meaning of community diversity, understood by Piqueras Infante (1996, p. 108), as "the milieu in which individuals form themselves and from which they extract the keys and explanatory contents as well as the decoding, interpretation and value instruments that allow them to interact with the rest of the people that are part of and share that culture." The elements of culture are learned and transferred in determined social contexts (making the identity construction possible), which in interaction allow community renovation. Talking about social identity, Scandroglio et al., (2008) says that "the social behavior of an individual varies along a one – dimensional continuum limited by two extremes: the intergroup, in which the behavior would be determined by the belonging to different groups

or social categories and the interpersonal, in which the behavior would be determined by personal relationships with other individuals and the personal idiosyncratic characteristics" (cited by Scandroglio et al., 2008, p. 59).

This cultural diversity in the community is a visible phenomenon that can generate conflict with explicit violence (Pérez Agote, 1986).

Melucci (1989, 1995, 1996, 1999), considering participation, says that collective identity refers us to shared definitions of a social situation construction process, allowing the individuals involved in it, to evaluate the situation and join collective action.

Community diversity allows the visibility of different identities, which also imply specificities (and similarities), which imply particular ideas about what a "good life" is and the characteristics its quality supposes. Ryan and Deci (2001, p. 159) say that "the definition of well-being is controversial and unresolved. The meaning of well-being and the factors that facilitate it are particularly at issue in cross-cultural studies in which a principal quest is the search for systematic variants versus invariants in well-being dynamics across widely discrepant social arrangements."

About the second meaning, community diversity considering the types of existing communities, we must say that the new forms of communication (travel, contacts, migration, the use of internet, etc.) have weakened the traditional relation between physical context and social space, allowing the subjects simultaneous participation in multiple communities in which physical presence is not necessary. That is why a basic classification of communities is one that distinguishes community as a locality from one that considers it a relational or interest group. In the same way, different levels of community analysis can be distinguished from microsystems to localities (Dalton, Elias, & Wandersman, 2001).

Modernization and its effects on community bounds have received a lot of attention in literature. In 1887, Tönnies differentiated the two basic forms of grouping: community and society, defining "community" as that form of socialization in which the subjects, considering their common origin, local proximity, or shared values, had achieved a grade of implicit consensus, while "society" refers to those spheres of socialization in which the subjects agreed on rational considerations adjusted to obtain the mutual maximization of individual profit (Honneth, 1999).

The benefits of community diversity, shown in multicultural societies, and the contributions made by different actors have long been discussed in the literature. Deepening the research into the quality of life associated with community diversity can allow us a better understanding of these societies.

Yasuda and Duan (2002) studied ethnic identity, acculturation, emotional well-being, and demographic characteristics of Asian American and Asian international students. The study showed that Asian American students scored higher on acculturation and ethnic identity than the other group while the two groups showed no differences in emotional well-being (both of them had relatively high levels of emotional well-being). Ethnic identity predicted Asian American students' emotional well-being and a moderately negative relationship was found between acculturation and ethnic identity for both groups of students.

Lum (2008) studied the relationships between ethnic identity and well-being in children and adolescents from monoethnic and multiethnic backgrounds in Malaysia, looking also into the implications that ethnic identity and ethnic status (monoethnic or multiethnic) have on self-esteem, life satisfaction, perceived discrimination, bullying, and antisocial behavior. The study had 261 participants from Kuala Lumpur and Petaling Jaya, from 10 to 16 years of age, 178 monoethnic and 83 multiethnic. As results, children and adolescents showed no differences on ethnic identity when compared by ethnic status and ethnic group. The research found positive correlations between ethnic identity and self-esteem, perceived discrimination and antisocial behavior and self-esteem and life satisfaction as well as significant negative correlations between perceived discrimination and self-esteem,

antisocial behavior and life satisfaction and antisocial behavior and self-esteem. Children and adolescentes who were bullies had the highest mean for antisocial behaviour so, they were more likely to engage in antisocial behavior than nonbullies/nonvictims and victims.

Cross-References

- ▶ Community Participation
- ▶ Community Satisfaction
- ▶ Community Values
- ▶ Cultural Diversity

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Community Economic Development

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Synonyms

Economic development for communities; Local progress

Definition

Community economic development is a process of developing and enhancing the ability to act collectively and an outcome, (1) taking collective action and (2) the results of that action for improvement in a community in the economic realm while positively influencing other areas of importance to the community (Phillips & Pittman, 2009).

Description

Different Definitions of Community Economic Development

Community development and economic development are frequently used interchangeably, and the term "community economic development" is often seen as well. Shaffer, Deller, and Marcouiller (2006) used it to describe the integration of the community and economic development processes. Some authors, however, also use it to refer to "local economic development" encompassing

growth (economic), structural change (development), and relationships (community). It is often seen in Canada and the UK (see, e.g., Haugthton (2005) or Boothroyd and Davis (1993)).

Linking Community Development and Economic Development

Shaffer et al., (2006) explain that the link between community development and economic development is often not fully understood. "Economic development theory and policy have tended to focus narrowly on the traditional factors of production and how they are best allocated in a spatial world. We argue that community economic development must be broader than simply worrying about land, labor, and capital. This broader dimension includes public capital, technology and innovation, society and culture, institutions, and the decision-making capacity of the community" (Shaffer et al., 2006: 64). The authors state clearly that community development and economic development are inextricably linked, and if scholars and practitioners of economic development do not address community development, they are missing an important part of the overall equation (Pittman et al., 2009).

The relationships between the two areas are strong. Phillips and Pittman explain the community economic development chain as follows: "When these communities take action (community development outcome), they create and maintain effective economic development programs that mobilize the community's resources. They also improve their physical and social nature and become more development ready, which leads to success in business attraction, retention and expansion, and start-up. Citizens should understand the community and economic development chain in order to move their communities forward efficiently and effectively. While community developers might not believe \they are practicing economic development and vice versa, in reality, they are all practicing community economic development. It is about capacity building (the process of community development) that leads to social capital which in turn leads to the outcome community development. In addition, communities with social capacity (the ability to act) are inherently more capable of creating good economic development programs should they choose to do so. When these communities take action (community development outcome), they create and maintain effective economic development programs that mobilize the community's resources. They also improve their physical and social nature and become more development ready, which leads to success in business attraction, retention and expansion, and start-up."

Cross-References

- ▶ Community Development
- ▶ Economic Development

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Community Effects

- ▶ Neighborhood Effects

Community Empowerment

- ▶ Community Capacity Building
- ▶ Community Participation

Community Festivals

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Synonyms

Carnivals; Celebrations; Community special events; Fiesta

Definition

A themed public occurrence beyond everyday experience; temporary, with a planned beginning and end yet often held at recurring periods; produced to bring people either living in a defined area or sharing common interests together with a variety of activities for an array of social, psychological, educational, and business purposes while giving rise to the social capital, a sense of place, and the well-being of its stakeholders.

Description

With the retreat of the glaciers 11,000 years ago, roving clans congregated into agrarian cultural hearths and spawned the first acknowledged community festivals. These special events, outside the realm of everyday life activity, held for reasons of sacred celebration and ritual as well as secular trading and security, lead to increased communitas, a transitory sense of camaraderie (Turner, 1969). Historically, Egyptian's celebrated their deities, pharaohs, and the changing seasons as related to the spring planting and fall harvest (Kraus, 1971). In China, early trade markets expanded with cultural influences during the Han and Tang dynasties (Russell, 2009). The Greeks, Romans, and Mayans honored their gods with sports and sacrifices (deLisle, 2009). Hebrews distinguished between sacred and secular celebrations, a concept embraced by Christians who rejected Roman circus, but incorporated pagan beliefs into religious holidays and events throughout the Dark and Middle Ages. With the onset of the Renaissance during the fifteenth century, secular community festivals reemerged highlighted by carnival, still celebrated 600 years later. Today community festivals continue to offer a multiplicity of irreplaceable social experiences in an ever changing global landscape.

The term community festival is extremely multifaceted and is best understood as a part of a greater typology that includes facility-, organizational-, and tourism-based events that may include cultural celebrations, carnivals, fairs, parades, and events focused on art, music, entertainment, sports, and religion. With the term even more broadly applied, it might also include business and trade shows, consumer and retail events, educational, recreational, and even political events (Getz, 2005). Depending on how one defines the size or concept of their own community, the term community festival has been used to describe everything from a small neighborhood gathering of only a few people to worldwide events such as Earth Hour that brings several million environmentally aware participants together once a year to mutually turn off their electric power.

Community festivals provoke several unique regions of societal importance ranging from religious and secular rituals that provide much needed and sought after tradition to a fun change of pace from work and everyday life and to a positive economic development. They have traceable roots as a strategy for community development in rural America (Green, Flora, Flora, & Schmidt, 1990; McGuire, Rubin, Agranoff, & Richards, 1994; Wilson, Fesenmaier, Fesenmaier, & Van Es, 2001) and have been recognized as helpful in larger regional development (Dimmock & Tiyce, 2001; Moscardo, 2007). When volunteers work together to produce a festival, this effort frequently serves as a catalyst for increased social capital within their community (Remington, 2003). Festivals allow others to share their culture and sense of place (Derrett, 2003) and are many times used for place marketing to boost public pride and attract tourists (Kotler, Haider, & Rein, 1993). Since the 1970s community-run

festivals have emerged as giants of tourism (Getz & Frisby, 1988) as they gained stature as one of that industry's fastest growing attractions (Crompton & McKay, 1997; McDonnell, Allen, & O'Toole, 1999). During this same period event management and event studies have followed a parallel growth pattern as community festivals have become increasingly professionally oriented. As a quality of life issue, today's community festivals, as they did for our distant ancestors, continue to foster a sense of well-being and deepen our feelings of communitas as unique experiences, beyond routine, with special feelings of belonging and sharing (Falassi, 1987).

Cross-References

- ▶ Arts in British Columbia, Canada
- ▶ Carnivals
- ▶ Celebrations
- ▶ Community Development
- ▶ Economic Development
- ▶ Marketing, Quality of Life
- ▶ Sense of Place
- ▶ Sports Activities
- ▶ Volunteers' Quality of Life
- ▶ Well-Being

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Community Food Security

- ▶ Food Security

Community Health

- ▶ Community Health Index
- ▶ Urban Health

Community Health Index

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Synonyms

Community health

Definition

This index was designed to measure the degree to which respondents believe that their community has specific problems.

Description

The index was introduced in Michalos, Ramsey, Eberts, and Kahlke (2012). It was formed by calculating respondents' average score on the following items.

Considering the city of. . .

1. Alcohol abuse is a problem here.
2. Drug abuse is a problem here.
3. Family violence is a problem here.
4. Unemployment is a problem here.
5. Sexual abuse is a problem here.
6. Racial discrimination is a problem here.

On a 5-point ▶ Likert scale, a score of 1 would mean that the respondent strongly disagreed with a particular item. A score of 5 would mean that the respondent strongly agreed with the item.

The average score for 482 respondents 18 years or older drawn from a random sample of households in Brandon, Manitoba, in June 2010 was 3.3, with a range from 1 to 5. The average item-total correlation was 0.79, and the ▶ Cronbach's reliability coefficient alpha was 0.93 (Michalos et al., 2012).

Cross-References

- ▶ Happiness
- ▶ Life Satisfaction
- ▶ Perceived Quality of Life
- ▶ Subjective Indicators

References

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Community Heterogeneity

▶ Community Diversity

Community Housing

▶ Public Housing

Community Impact Assessment (CIA)

▶ Social Impact Assessment

Community Indicator Projects

▶ Santa Cruz County (USA) Community Assessment Project

Community Indicators

- ▶ Community Life Measures, Quality
- ▶ Community QOL Measures
- ▶ Integrating Community Indicators and Organizational Performance Measures
- ▶ Outcomes and Indicators: Dayton-Montgomery County
- ▶ Sustainable Development Indicators
- ▶ Urban Sustainability Indicators

Community Indicators and Public Interest

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Definition

In order better to understand the type of tool that indicator systems represent within governance

for those who are not professionally guided by a scientific understanding of objectivity, we should seek to understand the diversity of perspectives on them and how these perspectives interact in the public sphere. Numerous communities in the public sphere, in addition to the scientific community, have identifiable and distinct interests in the development and application of an indicator approach, distinct notions of what would constitute the best information for an indicator system, the best route to its application, and the best outcomes of its application to the public realm and their position within it.

Description

Since the turn toward greater reliance on performance measurement that accompanied new public management styles of governance in the 1980s, public policy makers have constituted a recognizable community of practice (Wenger, 1998) in the development and use of indicators. This is to say that research and development of indicator systems has proceeded, to a large extent, with a view to the needs and perspectives of policy makers. While important, this focus does not reveal the whole story of success or failure in the adoption and implementation of indicator systems. Considering the existence and stake of additional types of communities opens up the field to see the difference that different interests could make to the design and use of indicators and also reveals the particular biases placed on practice by the emphasis on the needs of policy makers.

In order better to understand the type of tool that indicator systems represent within governance for those who are not professionally guided by a scientific understanding of objectivity, we should seek to understand the diversity of perspectives on them and how these perspectives interact in the public sphere. Numerous communities in the public sphere, in addition to the scientific community, have identifiable and distinct interests in the development and application of an indicator approach, distinct notions of what would constitute the best information for an indicator system, the best route to its application, and the best outcomes of its application to the public realm and their position within it.

Considering and supporting the role of multiple communities in an indicator system invites different communities to consider, develop, and defend unique opinions in each of the domains covered by the indicator system. In so doing, these communities learn to position themselves within a denser web of networks of groups and issue areas and to communicate their interests within a wider range of contexts and with more diverse others. This simultaneously enlarges the sphere of relevance of the indicator system as more people develop different ways of understanding and expressing the relevance and importance of different indicators to their interests. The diverse interests and perspectives of communities open up the possibility of finding and devising not only new interpretations of indicator trends but also new and innovative prescriptions for actions to reverse deteriorating trends, and increase the likelihood that policy recommendations will be heeded. Indicators have been argued as an important tool for governance as this evolves from primarily state-directed activities to activities that demand intensive participation and even leadership from non-state actors (Hezri & Dovers, 2006).

The four community types considered here – elected officials, engaged publics, communities of difference, and professional communities – are not, of course, exhaustive. More research is needed on the bounds and coherence of these and other potentially important communities in the path from indicator system commitments to implementation.

The Community of Elected Officials

Brugmann (1997a, 1997b) was among the first in indicator research to make the case that the success of indicator projects must be measured in terms of policy change and that the ability to effect policy change depends on projects' situatedness within the channels of power of government. It is unassailable logic that indicators must be used by elected politicians within government processes in order to be applied to

solving policy problems. But what are the specific characteristics of an indicator system that generate appeal to politicians, and does this appeal come at a cost? While on the surface, elected officials tend to recognize the importance of scientific experts in indicator selection and use, the deeper reality can be quite different (Porter, 1995). Elected officials themselves tend to drive the selection of indicators, even when the named indicators lack sufficient expert-driven research to support their measurement and even prior to determining the importance of the particular indicators chosen to constituents. An example is the case of the selection of headline indicators to guide assessment of the sustainable development and rural development strategies in the UK. Three of the politically selected headline indicators for these strategies – ▶ social justice, environmental quality, and well-being –have never been measured, and two others – community vibrancy and community potential – have been "quietly abandoned" from reporting because they are unmeasurable (Stapleton & Garrod, 2008).

The case of China's "Green GDP" provides an instructive example of what can happen when indicators that are measurable obtain politically unpalatable results. Beginning in 2004, President Hu Jintao endorsed an ambitious new system of environmental and economic accounting, known as "Green GDP." The aim has been to "produce a new performance test for government and party officials that better reflected the leadership's environmental priorities" (Kahn & Yardley, 2007, p. A7). The initial report revealed that pollution cost China just over 3 % of GDP in 2004 and that some provinces had a pollution-adjusted growth rate close to zero. While the Green GDP project served its intended purpose and the officials in charge of it had ambitions to improve the indicators for their second report to include better assessments of impacts on human ▶ health and ecology, the second report was never completed. The project was scuttled from official government channels. The reason is the following: "Wang Jinnan, the leading academic researcher on the Green G.D.P. team, said provincial leaders killed the project." (Kahn & Yardley, 2007, p. A7) In 2011, these efforts were revived and rebranded as a GDP quality index, combining values of ▶ sustainability, social equality, and ecological impact into the GDP (Watts, 2011).

Being housed within the channels of formal government is insufficient to achieve effectively "politicized" indicators. From the perspective of the community of elected officials, passing into the realm of politicized indicators would seem to lift the veil of ignorance so long held in place between the workers in data and themselves, putting the data and their workers at risk of embroilment in the continuous public debate around priorities and decisions. To be useful by the standards of this community, measures must engage directly with the information needs and decisions of elected officials, and elected officials need to have a stake in the outcomes of the measures. In addition, there is a careful balance to be found, measured in the currency that matters to this community, votes and thus public opinion, between a sense of value in heeding indicators and the risks of pitting indicators against less-factually driven political processes. This speaks to the need to include a carefully planned, locally contextualized implementation plan as part of the scope of work of an indicator system that intends to have utility for the community of elected officials. This work needs to engage directly with politicians and their key advisors and constituent groups, in an ongoing and non-adversarial way to allow a strategy for uptake to be devised that is realistic and based on mutual ▶ trust and understanding. Of course, this scenario of work runs up against several challenges, not least of which is the ever-changing landscape of local political power in most communities.

The Community of Engaged Publics

▶ Democracy demands the incorporation of public values into decision-making protocols; in fact, the notion of communicative rationality suggests that in democratic conditions, rationality itself arises from understanding developed between social actors in communication (Innes, 1998). Research into the development of indicator projects at the local scale has cleaved projects into

broad expert-oriented and citizen-oriented categories and pointed to the need for improvements to the democratic nature of projects on both sides of the divide (Eckerberg & Mineur, 2003).

An argument often made against involving the public in the design and application of indicators is that, because so many different interests exist in different segments of the public, people's attempts to promote these narrow interests will work against the pursuit of the broader common good. Complicating the process further, not all groups and individuals in the public are equally willing and able to represent themselves, due to socioeconomic differences, differences in ▶ education levels, and interest levels in different public issues. This situation poses challenges to the design of indicator systems that are able to incorporate the views of an expansive group of the public. The use of this situation of diversity as an argument against participatory approaches, however, seems to suggest that the only suitable situation for ▶ public participation in indicator systems would be one in which a uniformly interested and well-informed public were at hand: the citizen as computer (Churchman, 1968).

The notion of ▶ public interest often relates to the ideal of the democratic process, in which representative members of the informed and educated public gather to deliberate and reach consensus upon an action. In particular cases, however, public value and consensus are notoriously difficult to define. Often the term "public interest" is used to refer to general as opposed to local or specific interest, but this avoids the more difficult distributional equity questions of particular interests that may have a greater stake in a particular set of values for a particular decision. These difficulties do not mean that questions of public value had best be left alone in planning processes: often public opposition to indicators stems not from opposition in principle to the method but from the perception that the indicators are poorly chosen and miss the point of the most important issues on the public agenda. That is to say, public value can sometimes be more easily defined in the negative case than in the positive one: if the best available indicators meet all standards of objectivity but miss the point of the goals of public action, the indicators must be considered failures (Porter, 1995, p. 216). The refinement needed here to indicators' utility to the engaged public is a better understanding of how a sense of representativeness and objectivity can be built out of argumentation and dissensus as well as dialogue and consensus (Bridge, 2005).

The question with regard to the interplay between indicators and public values is not whether knowledge should be shared publicly, as the sharing of knowledge of some sort is basic to human society worldwide. Instead, the question relates to how this knowledge ought to best be shared, through public or private channels, formally or informally, editorialized, contextualized, and personalized or through standard means. Publicly shared indicator systems can provide crucial links between governments, citizens, and the nonprofit and for-profit sectors and can enable learning between cities and synergistic collaboration. On the other hand, quantified knowledge both reflects and creates public value for indicator-based approaches to knowledge, sometimes excluding recognition of the value of more profound qualitative and case-based contextual analyses. To the extent that indicator-based approaches solidify their hegemonic position over other forms of knowledge, a blockage can be created in the generation and spread of rich local knowledge, as generally better understanding of any issue leads to less ▶ satisfaction from the kind of knowledge that indicators can offer.

What motivation remains for members of the public to get involved with indicator systems, if they cannot count on their selected indicators themselves being heeded? Participants are drawn to the exercise by its democratic potential at least as much as by the potential to select specific measures. Their attempt may be to find the indicators best suited to produce desirable behaviors among public and private actors, rather than the most striking or reliable indicators for policy makers, per se. The democratic potential of indicator work is slighted by those who promote the use of standard, comparable indicators, with the laudable goals of minimizing work and

maximizing transfer of ideas and practices. The balance to be struck from the perspective of this community is between the costs in volunteer time and energy invested to give public concerns a new voice that still might not be heard by policy makers and the gains in learning, building new networks, connecting issues and perspectives in new ways, and finding a new audience with potential allies for change.

Communities of Ethnic and Cultural Difference

The practice of indicators involves aggregating individual experiences to groups which may be race-based, class-based, or otherwise a practice which has been considered an appropriate means to understand the plight of the less fortunate since the early twentieth century (Cobb and Rixford, 1998). Thus, the meaning and significance of indicator projects can differ for different cultural and ethnic communities. The uniformity of standards and progress measures in cities around the world which is often promised by an indicator-based approach has unproven validity across the world's diversity of cultures, historical experiences, and ▶ development trajectories. While indicators are often thought of as tools that mediate if not level cultural and ethnic difference, this is not always how it seems from the perspective of communities of difference. An example comes from the case of New York City under Mayor Giuliani's Compstat system, an indicator system that standardized and streamlined ▶ crime reporting throughout the city.

The mayor and police chief have lauded the success of the Compstat program at home and in cities around the world, claiming that it allows the police department to tailor policing strength and services to those precincts where particular kinds of crime are reported and thus to increase the effectiveness of policing overall (Bai, 2007). Following its initial success, however, allegations and incidents of injustice and police brutality perpetrated against immigrants and African Americans tarnished the reputation of Compstat at home in New York, and racial tensions flared. The police chief blamed the mayor's drive to continue to achieve statistical success in crime reductions. Clearly, to innocent people like Amadou Diallo, the Guinean immigrant who was shot 19 times and killed by police (none of whom were convicted) in 1999 for simply standing in his doorway (Economist, 1999), Compstat cannot be considered a culturally neutral tool. Instead, it takes on the status of a device driving additional efforts to find and eradicate crime in poor, Black neighborhoods, despite clear negative impacts on the innocent. The blind quest for measureable benefits can come at significant cost, and this cost can be borne differentially by communities of ethnic and cultural difference.

The interpretation of indicators referring to social groups calls for a variety of assumptions based on the social distinction and distance between the interpreter and the group being encapsulated in the statistic. This practice invokes what Plumwood (1998) has referred to as "remoteness," which manifests between communities that are geographically distant but also those that are distant in terms of feeling the consequences in one of what happens in the other, remoteness of the means and opportunity to communicate, and time and generational remoteness. Indeed, attempts to overcome the challenges of increasing ▶ cultural diversity have often featured the substitution of deculturized mathematical standards for cultural specificity – as means of integration, subversion, or sometimes both. The use of indicators in multicultural cities may be at once egalitarian and oppressive.

Concern for the ability of indicators to capture trends in multicultural values emerges in designing qualitative in addition to quantitative indicators. For many, the inclusion of qualitative indicators is a clear means to allow space for values and interests that cannot be described in concise numeric terms by existing data sources. Selecting an indicator able to capture this "yearning for something more" quickly enters into the territory of cultural diversity. Value systems, of course, vary by cultural group; to the extent that these can be guided by indicators, this means different groups need different indicators.

As is the case with respect to the tension between indicators for the policy-making community and for the community of engaged

publics, the tensions created by an indicator system specific to communities of cultural difference are in need of greater research. Numerical and statistical methods have gendered, racialized, and ideological dimensions. Historically, these methods have privileged those groups already in power. It is facile to conclude simply that indicators must privilege the dominant groups, however. What is needed from the perspective of communities of difference is the opportunity to participate in the design and operationalization of indicator systems with the skills and resources at hand to make informed contributions in ways that recognize the distinct value of their cultural differences. This situation shines an even brighter light on the need for broad and meaningful engagement and locally contextualized indicators. At the same time, it challenges the preference of some elected officials for simple, easily quantifiable, standardized measures.

Indicators and Professional Communities

The utility of urban indicator systems spans a large number of professions, such that groups of professionals from engineers to planners to bankers make particular demands of indicators and raise particular questions about their application. At the same time, groups of citizens who do not share a professional community may feel as though they come to approximate one through indicator work, because of the perception of indicator systems as objective and data-driven. Community-based indicator work can feel to participants like the formation of a new professional community identity, but the work is not likely to be perceived at that level by others.

When a professional community adopts an indicator-based approach and a particular set of indicators as its own, that system acquires legitimacy within the bounds of public perceptions of that community. Thus, for example, the point system for green building, LEED (Leadership in Energy and Environmental Design), has been adopted by the North American building professions and become a system that professionals must know and abide by, despite the fact that many could dispute the indicators used. It is notable that, in most cases, there is nothing about the practice of indicators that is fundamental to the practices of the professional communities that use indicators. This means that there is little reason to expect a special interest or aptitude in indicators among members of professional communities.

The drive to standardize and publish indicators comes not from within professional communities but from threats external to the community that require them to bolster resources with which to defend their judgments, as these judgments are criticized or swayed by the interests of others. Indicator systems are thus loaned institutional credibility by professional communities in order to produce numbers that can hold up to political pressure. The demands on personal credibility are greatly reduced if it appears that other competent people are in a position to check or recalculate results, especially if some of these people have contrary interests. At the same time, anonymous rules and institutional safeguards within bureaucracy can come to take the place of collegial trust within the professional community as well as distance the professional group from the clientele it serves.

While the move toward indicators by professional communities can be seen as a move toward bureaucratization and distance from personal investment in one's profession, early American social scientists argued in the case of the professional community of government employees that strong democracy drives the use of objective knowledge systems, such as indicators. The contrast case these social scientists considered was the British case, in which less formal reasoning and communication was made possible by the more cohesive, elite makeup of government (Ross, 1991). Because tacitly shared knowledge and expert judgment have been tied closely to class-based hierarchy and pedigree, greater reliance on numbers and statistics was purported to even the scales for democratic progress through providing greater access to public information, either by joining the professional ranks of its creators or receiving that knowledge as citizens. Thus, indicators can provide a way in to conversations that historically have been the exclusive domain of "the old-boy network."

The practice of indicators tends to follow the assumption that in order to be trustworthy, one must be objective, and in order to be objective, one must be disinterested. This, to many, has been the triumph of pure sciences like mathematics and physics: using rules of discourse that are so constraining that the biases of individuals are screened out (Porter, 1995). The belief that democratic governance processes might approximate this kind of disinterested, analytical behavior underlies the presumptions of many indicator systems at work today – as well as their failures to inspire, transform, or otherwise be effective. If elected officials typically place a large amount of faith in the scientific community to provide the best available knowledge for decision making, scientists typically place an equally large amount of faith in the community of elected officials' ability to isolate, understand, and serve "the public interest." Both faiths should be shaken. This entry is based on the argument developed more fully in Holden (2009).

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Community Indicators Consortium

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Synonyms

CIC

Definition

The **Community Indicators Consortium** ("**CIC**") is a US-based nonprofit organization established as a learning community to advance practice and research in the field of ▶ community indicators, defined broadly as the development and use of social-, environmental-, and economic-based measures at the subnational scale which inform communities about past, present,

and future trends, inform better decision making, and have a positive effect on overall community well-being and/or ► quality of life.

Description

The Community Indicators Consortium (CIC) is an open learning network and global community of practice among persons interested or engaged in the field of indicators development and application. The mission of the Community Indicators Consortium is to:

- Advance the art and science of indicators
- Facilitate the exchange of knowledge about the effective use of indicators
- Encourage development of effective indicators
- Foster informed civic and media discourse about local, regional, national, and global priorities

CIC was organized in the belief that information sharing, collaboration, and open dialogue are key to the advancement of people, the quality of community life, and the ► sustainability of our shared environment. CIC has members from communities in the United States and across the globe who represent community-based indicators projects; federal, state, regional, and local governments; academia; businesses; and philanthropic organizations.

History

The Community Indicators Consortium was conceived at the Third International Conference: Advances in the Science and Practice of Community Indicators, held in Reno, Nevada, in March 2004 and founded as a legal entity in 2005. CIC has its roots in the initial efforts in community indicators which began with the Charity Organization Society of New York's initiative, funded by the Russell Sage Foundation, to survey conditions in Pittsburgh in 1910, and which sparked a wave of similar surveys of over 2,000 municipalities (Smith, 1991). The sustainability movement gave rise to initiatives, like ► Sustainable Seattle, that fully engaged the public in the selection of indicators and led to the identification of, and the search for methods to measure, various quality of life indicators. In the mid- to late 1990s, the movement of community indicators experienced a resurgence, largely due to the spread of the Internet, trends toward data liberation and open access to government and decision making by citizens and nongovernment groups, and a deeper understanding of the effects data and indicators have on decisions that matter to communities. The first national community indicators conference in the United States was held in Denver, Colorado, in 1996. Hundreds of people, from around the nation, most already working on community-based projects, attended and spoke about their work in the field.

In 1998, the First International Conference on Quality of Life in Cities, including a focus on community indicators, was convened in Singapore (Yuan, 1998). People attended from all over the world, once again showing significant international interest in this growing movement. The work of Redefining Progress, a San Francisco-based research and policy think tank questioning the GDP as a measure of national progress, was highlighted, and some who later helped found CIC were highlighted.

Initial progress was small in scale, with limited funding coming via the Brookings Institution and memberships, yet it led to further organization, pushing the movement toward the development of the Community Indicators Consortium. The Community Indicators Handbook (Tyler Norris Associates, Redefining Progress, & Sustainable Seattle, 1997) was developed by a core group of practitioners containing a step-by-step guide on how to build community indicators systems, key factors for success, and highlighted best practices (a second edition was published in 2006). This resource also included profiles of projects in several communities, including the current long-standing systems in Jacksonville and Truckee Meadows, which shine among others (also see Besleme, Maser, & Silverstein, 1999). The handbook sparked interest in other communities to begin working with community indicators and was the basis for indicators work

initiated in Baltimore, Denver, Boston, and several other cities and communities (Besleme & Mullin, 1997).

CIC Approach

The Community Indicators Consortium has grown in its first 8 years to become an active, open learning network and global community of practice among persons interested or engaged in the field of indicators development and application. CIC facilitates the sharing of knowledge of principles, practice, and research around developing and using community indicators at all levels.

CIC acts as a cross-discipline, cross-sector, and cross-platform entity looking to connect people, ideas, processes, and tools in the wide-ranging field in order to improve the contributions of community indicators to improving community life. The organization facilitates connections between governmental entities, nonprofits, research groups and institutions, and for-profit companies and between the many approaches and themes within practices of community assessment, performance measurement, and community indicators to enhance the understanding of community issues to produce positive outcomes.

CIC is led by a volunteer international board of directors, serving 3-year terms, and a small paid staff. In 2012, there were about 60 organizational members and 230 individual members of CIC. Funding is largely provided by various nonprofit entities and philanthropic organizations, including at different times the Glaser Progress Foundation, the Alfred P. Sloan Foundation, the Annie E. Casey Foundation, the Robert Wood Johnson Foundation, and the State of the USA. Other funding sources include memberships, business sponsorships, donations, and revenue from conferences. Collaborations are formed between CIC and various local or regional indicator groups and organizations in an effort to combine resources to further progress within the field. Examples of these include the National Association of Planning Councils (NAPC) and the National Association of City and County Health Officers (NACCHO).

Guiding Principles of CIC

- **Open participation**: CIC is an open learning network, that is, participation is available to any person or organization with an interest in community indicators.
- **Collaboration**: CIC-sponsored activities are carried out collaboratively, with effort contributed from various parties in the network. The benefits of a collaborative approach include leveraging existing staff capacity, consensus building, encouragement of shared creativity, and relationship building.
- **Non-duplication**: CIC aims to enhance, not replace or replicate, the work of participating individuals, associations, organizations, and networks.
- **Facilitation**: CIC promotes the development of independent, unmediated connections among its wide range of participants. Such relationships are a boon to information sharing, problem-solving, and creativity.
- **Access to learning**: CIC provides mechanisms through which participants can gain access to the learning of others.
- **Structure follows function**: The structure of CIC is determined through the process of identifying specific collaborative functions and organizing to carry them out.

Indicators are vital tools for community-based projects and studies as they provide a way for communities to both quantitatively and qualitatively explore and assess local trends and patterns. They are typically focused around broad issues (▶ Health, wellness, Vitality, sustainability, ▶ Liveability, ▶ Equity, innovation) or more specific topics (results, Organizational Performance, specific outcomes). They operate at various geographic scales – ▶ neighborhood, municipality, county, region, and watershed. Indicator projects strive to balance the utility of reporting many indicators in an attempt to capture the full diversity of experience and the problems related to logistics, comprehensibility, and inefficiency when reporting too many indicators in a single project. While a quantitative approach typically focuses on making standard, secondary data sources more meaningful and accessible at

the community scale, a qualitative approach can allow for enhanced local participation in project framing, design, the collection of data, and interpretation of results, contributing to better informed decision making. Community indicators can be applied to wide-ranging social issues affecting various parts of communities from public health, environment, economic development, safety, crime, and education, all having an effect on the well-being of a community, small or large.

CIC Activities

CIC undertakes a variety of activities and special projects to advance the field.

Website. The CIC website (http://www.communityindicators.net) offers a place where community-based practitioners, academic experts, engaged community residents, public officials, students, civic leaders, planners, media professionals, and other stakeholders can learn from one another and participate in an active global learning community. It is a repository for projects and publications and a place for networking and building upon our resource base, particularly through the indicator project database, indicator resource database, and webinars, described below.

Indicator Project Database. CIC hosts and manages an indicator project database which allows members of the community to add their project with descriptions, links, related works, and references. The online database contains projects from around the world allowing individuals and groups looking for related projects to filter and sort by issue area, theme, or subject, read an abstract about projects, and contact project leads for possible collaboration.

Indicator Resource Database. A comprehensive resource database is under development in conjunction with the project database. This database enables the spread of knowledge between members through sharing a wide variety of resources for potential use by the field from academic and professional journals, books, reports, videos, and web sites. Resources can be added by members as well as viewed, downloaded, or purchased from the creators.

Webinars. The Community Indicators Consortium hosts webinars featuring leading practitioners and researchers. The webinars allow for an interactive platform between CIC members to learn about new and existing projects, get up-to-date details of projects, as well as allow for discussion. Webinar archives are available for members.

Conferences. To allow in-person interaction and connections to be made between members, CIC hosts regular conferences for members to interact with experts in the field in group and individual settings. All CIC members and guests are invited to attend, present, and interact with other members based on a broad range of community-focused issues. Panels with government leaders from local and national levels, private industry firms, nonprofits, academics, and others attend to share projects and connect with others in the field. Breakout groups allow for subject-specific talks to be given, plenaries allow for interaction on a larger scale, and receptions allow for networking. Past conference locations include Reno, Nevada (2004); Burlington, VT (2005); Washington, DC (2005); Jacksonville, FL (2007); Bellevue, WA (2009); College Park, MD (2012); and Chicago, IL (2013). In 2011, CIC hosted a virtual conference online. Conference proceedings are available to attendees and CIC members. A selection of papers from the 2009 conference were edited and published as a special issue of ▶ Applied Research in Quality of Life (2010, 5(4)) journal (Holden & Phillips, 2010).

Special Projects. With support from the Alfred P. Sloan Foundation, CIC facilitated a 3-year project (2009–2011) to advance the integration of community indicators and performance measures (CI-PM) at all levels of government and society. This involved formation of a broad steering committee, preparation of case studies of communities with promising practices, webinars featuring practitioners as well as theorists, support for CI-PM tracks at CIC conferences, and expansion of the CIC Project Database as a reference tool. In 2011, CIC began a program with funding from the Robert Wood Johnson

Foundation to provide technical assistance to 12 communities working with the National Association of City and County Health Officials to advance their work on community health and to work toward accreditation of their health department. RWJF also sponsored a health track in the program at CIC's 2011 and 2012 conferences.

Cross-References

- ▶ Arizona Indicators
- ▶ Canadian Index of Well-Being
- ▶ Community Indicators Victoria
- ▶ Community Participation
- ▶ Community Well-Being Index
- ▶ Indicator Framework
- ▶ International Society for Quality of Life Research ISOQOL
- ▶ Mexico, Quality of Life
- ▶ Santa Cruz County (USA) Community Assessment Project
- ▶ Social Indicators
- ▶ Sustainable Communities Movement
- ▶ Sustainable Seattle

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Community Indicators Victoria

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Synonyms

Victoria, British Columbia, Canada; Well-being indicators for Victoria, British Columbia, Canada

Definition

Community Indicators Victoria (CIV) was established in 2006 at the McCaughey Centre within the School of Population Health at the University of Melbourne. The project is the first independent, statewide community indicators project developed in Australia providing community indicators for all 79 Victorian municipalities through an online web platform: www.communityindicators.net.au.

CIV was developed from a pilot project that included representatives from academia, community organizations, local government, and state government departments and also involved extensive consultation with the community (Wiseman et al., 2006). This led to the development of a comprehensive framework of community well-being according to five broad domains of well-being: healthy, safe, and inclusive communities; dynamic, resilient local economies; sustainable built and natural environments; culturally rich and vibrant communities; and democratic and engaged communities. Useful and meaningful community indicators should be policy relevant and amenable to changes in policy. Hence and all of the community indicators included in each of the CIV framework domains are aligned to relevant policy areas. Community indicator projects should also be guided by ▶ ideology and theory and an

overall conceptual framework (Dluhy & Swartz, 2006), and this has been central to the development of CIV which has a strong ▶ social justice and ▶ sustainability focus.

Description

Community indicators are aggregated or summarized statistics and generally include, but are not limited to, measures of social, economic, and environmental data relevant to a specific geographic area. Indicators are not raw data but abbreviated and analyzed statistics that form broad measures of community well-being (Ramos & Jones, 2005). Their main purpose is to highlight key issues of importance to a community, but they also have many other purposes: they provide measures of ▶ quality of life and progress of society, inform and evaluate community planning and policies, simplify complex problems, communicate data, and stimulate discussion and engage the community in future planning (Briggs, 1998; Davern, West, Bodenham, & Wiseman, 2011).

Community is an important focus for all community indicator projects and reflects a focus on place. In CIV, "place" refers to the southern State of Victoria in Australia, and all indicators are provided at the municipal or local government area level. The "community" in community indicators also refers to community relevance and involvement which are essential for successful community indicator projects like CIV. If a broad framework can be agreed upon by multiple communities, then results from the project have more power and result in significant influence necessary for policy change. Thus, community indicators projects like CIV encourage the process described by Holden (2009) as participatory and deliberative democracy. Numerous Victorian municipalities have adopted and adapted the CIV framework for council planning purposes and report on these indicators within regular council planning process. Partnership with local government is essential to CIV and the impact and influence of community indicators and the CIV framework is described more fully in Davern, West, Bodenham & Wiseman (2011). However, the impact of CIV extends beyond municipal public health planning and CIV is also used as an advocacy tool to assist with funding submissions, a community profiling resource, and a provider of training resources for organisations and individuals who want to learn more about CIV and the use of community indicators.

The community indicators included in CIV have been guided by the project's conceptual framework, and data have been collated from two major sources: existing administrative data and survey-based data. Administrative data is collected by federal, state, and local government departments including the Australian Bureau of Statistics which is the chief national statistics office for Australia. These data are monitored and managed by government personnel on a regular basis, and key departments and agencies have agreed to share their data with CIV with the understanding that data will be updated and published as indicators on the CIV website. Administrative data also includes spatially based data sets that are analysed using Geographic Information Systems to form new CIV indicators. Survey data have also been included in CIV if administrative data are not available for indicators that have been identified in the CIV framework. Two large scale population-based CIV surveys have been conducted in 2007 and 2011 across all Victorian municipalities surveying more than 25,000 Victorians. These surveys have enabled the collation of additional community indicators including ▶ subjective well-being, ▶ self-reported health, community connection, perceptions of safety, ▶ work-life balance, discrimination, internet access, citizen engagement, arts participation, ▶ transport limitations, and water recycling. The expense of the surveys is high, but they are extremely valuable for quantifying community issues of concern that are not included in administrative data collection. The survey-based data also enables the inclusion of subjective measures that complement the objective measures usually sourced from administrative data.

The CIV framework is summarized in Table 1 according to the five broad domains and policy areas.

Community Indicators Victoria, Table 1 The Community Indicators Victoria Framework

Domain	Policy area	Indicators
Healthy, safe, and inclusive communities	Personal health and well-being	Self-reported health
		Subjective well-being
		Life expectancy
		Adequate physical exercise
		Fruit consumption
		Vegetable consumption
		Obesity
		Smoking status
		Risky alcohol consumption
		Psychological distress
	Community connectedness	Feeling part of community
		Social support
		Volunteering
		Parental participation in schools
	Early childhood	Australian Early Development Index
		Child health assessments
		Immunization
		Breastfeeding
	Personal and community safety	Perceptions of safety
		Crime
		Family violence
		Road safety
		Workplace safety
	Lifelong learning	Home Internet access
		Library usage
		Apprenticeships and vocational training enrolments
		Destinations of school leavers
		School retention rates
	Service availability	Access to services
Dynamic, resilient local economies	Economic activity	Retained retail spending
		Highly skilled workforce
		Business growth
	Employment	Employment rate
		Unemployment rate
		Local employment
	Income and wealth	Income
		Distribution of income
		Per capita wealth
		Financial stress
		Distribution of wealth
		Food security
	Skills	Educational qualifications
	Work-life balance	Adequate work-life balance
Sustainable built and natural environments	Open space	Access to areas of open space
		Appearance of public space
	Housing affordability	Housing affordability
	Transport accessibility	Transport limitations
		Public transport patronage

(*continued*)

Community Indicators Victoria, Table 1 (continued)

Domain	Policy area	Indicators
		Dedicated walking and cycling trails
		Practical non-car opportunities
		Roads and footpaths
	Sustainable energy use	Greenhouse gas emissions
		Household electricity use
		Household gas use
		Renewable energy use
	Air quality	Air quality
	Water	Condition of natural streams and waterways
		Water consumption
		Waste water recycling
	Biodiversity	Native vegetation cover
		Carbon sequestration
		Weeds and pests
	Waste management	Household waste generation
		Household waste recycling
Culturally rich and vibrant communities	Arts and cultural activities	Opportunities to participate in arts and cultural activities
		Participation in arts and cultural activities
	Sporting and recreational activities	Opportunities to participate in local sporting and recreational activities
		Participation in sporting and recreational activities
	Cultural diversity	Community is an accepting place for people from diverse cultures and backgrounds
Democratic and engaged communities	Citizen engagement	Opportunity to have a say on important issues
		Participation in citizen engagement
		Women local councillors
		Opportunity to vote for a trustworthy political candidate
		Membership of local community organizations and decision-making bodies

Cross-References

- ▶ Community Indicators Consortium
- ▶ Livability
- ▶ Livability Index

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Community Infrastructure Mapping System (CIMS)

▶ "Community Accounts": Newfoundland and Labrador, Canada

Community Life Measures, Quality

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Synonyms

Community indicators; Community QOL measures

Definition

Quality of community life measures attempt to quantitatively assess "the shared characteristics residents experience in places (for example, air and water quality, traffic, or recreational opportunities), and the subjective evaluations residents make of those conditions" (Myers, 1987, p. 109). This assessment involves the use of social indicators, that is, statistics intended to summarize important characteristics of life conditions (Sirgy et al., 2006). The types of life conditions assessed vary considerably but typically include aspects of a community's economic well-being, safety, health, and the social and physical environment. The term "community" itself can be defined in numerous ways and in the context of quality of life measures; it is typically defined by geographic region (e.g., neighborhood, city, province, country). Quality of community life measures can include objective and/or subjective indicators. Objective indicators are numerical descriptors which reflect a particular level of living conditions independent of personal evaluations (e.g., crime rate, poverty rate). In contrast, subjective indicators have a clear evaluative component (e.g., perceived neighborhood safety, perceived income adequacy). When sets of indicators are combined mathematically, the resulting measures are called indices.

Description

There has been a proliferation of literature concerning the development of community quality of life indictors and indices in the last two decades. Academic journals such as *Social Indicators Research*, *Quality of Life Research*, and *Applied Research in Quality of Life* are important scholarly sources, as are book series such as *Best Practices in Community Quality of life Research*, edited by Joe Sirgy and colleagues (Sirgy et al., 2009a, b, 2011, 2004, 2006). Many community-based descriptions of projects are also accessible on-line (e.g., the Community Indicators Consortium at www.communityindicators.net). A key distinction often made in this expanding literature is between "top-down" and "bottom-up" methods in developing quality of community life measures (Dluhy & Swartz, 2006). In bottom-up approaches, the selection of indicators involves participation of a wide variety of individuals, community groups, and stakeholders, with "experts" involved on more of a consultative basis. In top-down approaches, researchers and other experts play a more prominent role in guiding indicator selection. The use of theory and a clear conceptual framework to direct the choice of indicators is typically associated with top-down approaches. In a recent review of community indicator projects, Sirgy (2011) identified six concepts which most frequently underlie theoretically driven community quality of life measures: (1) socioeconomic development, (2) personal utility, (3) social justice, (4) human development, (5) sustainability, and

(6) capabilities and functioning. According to Sirgy (2011, p. 2), quality of life measures based on theory "are treated with much more credibility because they are based on sound theory that imbue meaning to the indicator system and guides its development and implementation," whereas community-driven approaches to indicator selection tend to result in measures which are "constrained in meaning or theoretical relevance." According to Dluhy and Swartz (2006), the development of unique community-specific measures is especially challenging when one wants to integrate findings across larger geographic regions and "isolate the commonalities and elements that lead to success" (p. 4). On the other hand, civic engagement in the development of community quality of life measures is considered by many as also crucial to their successful application, that is, as tools designed to monitor and ultimately lead to policy change which will enhance the life conditions of its residents (Lasker & Weiss, 2003). Quality of life is a value-loaded concept, therefore, increasing the importance of broad-based local participation to ensure that the indicators selected accurately reflect community values. Bottom-up approaches are also consistent with the idea that when people are in control of determining the agenda, they are more likely to work toward achieving its goals. Thus, a major challenge in community indicator development is balancing "these competing tensions of indicators being guided by theory, yet relevant to a local area while at the same time being able to be replicated and compared to other areas" (Davern, West, Bodenham, & Wiseman, 2011, p. 322).

In addition to being informed by well-established theory and community involvement, quality of community life measures are typically evaluated on the basis of traditional quantitative research criteria combined with more pragmatic considerations (Dluhy & Swatrz, 2006; Hagerty et al., 2001). In addition to being valid and reliable, community quality of life measures should be understandable, accessible, and be available at different levels of aggregation and for different time periods. Community indicators should also be strongly linked with policy and be sensitive to relevant changes in the community rather than reflecting irrelevant influences.

Quality of community life measures should also include both objective and subjective indicators, as they are only modestly associated with each other (McCrea, Shyy, & Stimson, 2006) and there are advantages and disadvantages to both (Diener & Suh, 1997). The source of objective indicators is usually secondary data (e.g., census data) often making them more easily available and less costly to collate than subjective indicators. Objective indicators are also typically based on standardized definitions and come from known and reliable data sources, enhancing comparability over time and by region. Objective measures, if chosen carefully, may also be more sensitive to changes in policy than their subjective counterparts. Disadvantages of objective indicators have also been noted. Objective indicators are based on the assumption that there is widespread agreement about which elements in a community are desirable or undesirable – which may not always be the case (Noll, 2002). Choice of objective indicators can be influenced more by availability of data than by an explicit theory or by community input. There is also increasing awareness that the term "objective" is a misnomer (Holden, 2009) and that the selection (or not) of a set of indicators reflects a particular world view (McCracken & Scott, 1998). The use of subjective indicators in community quality of life measures is increasing though they are not without their own limitations. In addition to generally being more expensive to collect, concerns have been raised regarding the use of subjective indicators as valid and reliable indicators of community quality of life (Cobb, 2000).

Quality of community life measures generally consist of multiple, individual indicators and/or composite indices, and the advantages and disadvantages of both have been debated in the literature (Booysen, 2002; Hagerty & Land, 2007). On the one hand, composite indices have the potential to offer an integrative and parsimonious perspective of a community's quality of

life and can facilitate communication (Hagerty & Land, 2007). On the other hand, disadvantages of composite indices have been described, such as the resulting index being too general to be of much use and/or encouraging of overly simplistic policy conclusions (Booysen, 2002; Saltelli, 2007). The quality of a composite index is dependent, to a large degree, upon the quality of the individual indicators which comprise it. Many of the same conceptual and methodological challenges associated with individual community quality of life indicators are equally applicable to their aggregated counterparts. Composite index construction can create additional difficulties that need to be addressed, such as determining the relative importance of indicators (i.e., weighting), how to appropriately and meaningfully combine different units of measurement, and how to deal with missing data, among others. To complicate matters, although guidelines have been suggested (Nardo et al., 2008), little agreement exists concerning the best methods for aggregating indicators into an index (Hagerty & Land, 2007).

Discussion

The community quality of life research literature suggests that the best measures are generally those which include broad-based community involvement; have an explicit, well-defined theory to guide selection and aggregation of indicators; use reliable, valid, sensitive, and stable indicators that can be linked with relevant policy; and use a combination of objective and subjective indicators. Aggregation of indicators into an index requires additional considerations, including method of standardization, determining the relative importance of indicators, adjusting for direction of movement, scaling of variables, and contending with missing values. Although multi-indicator approaches provide a detailed view of quality of life, they do not provide a parsimonious understanding of the data. In contrast, summary measures have the potential to offer a valuable, integrative perspective concerning community quality of life.

Cross-References

- ▶ Community
- ▶ Community QOL Measures
- ▶ Composite Index Construction
- ▶ Conceptual Framework for Quality of Life
- ▶ Indicator Selection Criteria
- ▶ Indicators, Quality of Life
- ▶ Indices
- ▶ Quality of Life
- ▶ Social Indicators
- ▶ Social Indicators Research
- ▶ Subjective Indicators

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Community Mapping

► Mapping Neighborhoods

Community Multiplicity

► Community Diversity

Community Participation

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Synonyms

Citizen oversight; Citizen participation and bottom-up planning; Civil society; Collaboration; Community deliberation; Community development; Community empowerment; Deliberative democracy; Democracy; Open government; Public participation; Public policy

Definition

Community participation involves both theory and practice related to the direct involvement of citizens or ► citizen action groups potentially affected by or interested in a decision or action. Community is conceptualized as involving a social group of any size whose members reside in a specific locality (often referred to as community of place) or sharing a common heritage or set of values, for example with a common cultural identity or with political bonds (often referred to as community of interest). Participation is the act of engaging in and contributing to the activities, processes, and outcomes of a group. The general tenet of community participation holds that those who are affected by a decision have a right to be involved or have some degree of influence over any process and outcome related to its legislation, execution and adjudication. Community participation may be regarded as a vital part of democratic ► governance through the empowerment of citizens.

Description

Community participation has been described as an integral component of many disciplines, fields, and subfields including sociology, political

science, public policy, and public administration. The historical antecedents of community participation have conceptual and applied roots in literature dating to the ancient Greeks. Much of the earliest thinking about the possible nature and forms of participation emerges from a somewhat wider collection of thought, namely, that focused on ▶ civil society and how societies organize and sustain themselves. One recurrent theme in the civil society literature examines why and how citizens participate in the organization and maintenance of institutions of society. Although we find some of the earliest democratic practices emerging in ancient Greece, much of the literature of that era is less explicit about potential forms and rationales. Socrates, Plato, and Aristotle were, each for their own reasons, critical of governance by the people. Instead, much of this early literature establishes the foundations for participation in a different way, namely, by exploring two related sets of tensions. One tension is between that which is legal versus that which is moral and a second tension between placing an emphasis on the social versus the individual. For example, the Stoics, belonging to a school of philosophy founded in Athens in the early third century BC, saw morality, reason, and natural law as conjoined and intertwined. Consistent with the Stoics' thinking, Cicero argued, "true law, or right reason, which is in accordance with nature, applies to all men and is unchangeable and eternal" (Seligman, 1992: 17). This recognition of the place of natural reason among all men, and not just elites, is a critical step toward a shift in political theory, without which, participation would be nearly unthinkable – namely, popular sovereignty. The explicit move by social contract theorists, especially John Locke (1632–1704) and Jean-Jacques Rousseau (1712–1778), to locate sovereignty outside the state, and with the people, makes possible the increasingly liberal, diverse, and inclusive forms of participation in democratic practices that we see today.

Community participation has a distinctly public connotation and linked to terms such as ▶ communitarianism, civil society, ▶ collectivism, and civic republicanism. The term res publica, or "public thing" refers to the public realm or common world that according to Arendt (1958:52) "gathers us together." In the context of the United States, the active role of citizens in political process and popular control was central to US President Thomas Jefferson's (1743–1826) civic republican argument of a shared sense of citizen duty and responsibility. ▶ Collective responsibility was a necessary feature of self-governance for Jefferson who in 1816 wrote, "My most earnest wish is to see the republican element of popular control pushed to the maximum of its practicable exercise" (Hartmann, 2004: 193). Alex de Tocqueville (1805–1859) equated public participation with liberty and argued that strong communities foster civic mindedness, while atomization of the population causes apathy and facilitates oppression. Tocqueville recognized that Americans were practicing not idealistic selflessness nor complete self-interest but rather self-interest rightly understood.

Community participation is related to civic republicanism which is defined as a constellation of beliefs centering around (1) the existence and legitimacy of public values and the common good, (2) the use of citizen deliberation as the principal democratic decision-making tool, and (3) the state's legitimate role in fostering civic virtue among its citizens (Poisner, 1996). Civic republicans believe citizens create common good through discourse, that a common good is created and not discovered, and that the use of deliberation as a process leads to creativity that in turn shapes preferences, and leads to civic virtues and ultimately to competent political participation. Community participation as framed under these tenets posits responsibility toward citizen action but also in providing opportunities for citizens to be public and act.

The tensions related to community participation are often framed as negative and positive ▶ liberty or between freedom from interference by other people and the power and resources to act to fulfill one's own potential (Berlin, 1958). Others argue that responsibilities associated with civic interaction may rely less on formal civic education and more on opportunities for

empowerment (Barber, 1984). Citizens participating only in a consultative role but without some form of delegated power have been referred to as merely a gesture of tokenism (Arnstein, 1969). For some, participation is seen to be sufficient when expressed by casting a ballot, providing testimony at a hearing, or filling out a survey. Active engagement and citizen-to-citizen relationships is seen to be constitutive of life in democratic societies (Ostrom, 1997). Moreover, providing only opportunities for passive forms of participation is seen as insufficient sufficient, with calls for establishing and encouraging conditions for substantive and authentic expressions of citizenship (Williams & Matheny, 1995; King, Feltey, & Susel, 1998). These conditions include a well-educated populace, citizens who share a responsibility and are motivated by community, and a noncoercive environment in which to participate. The responsibility of any individual to participate in public matters may ultimately lead to more civil, trustworthy, and collectively caring communities (Kemmis, 1990).

Community participation is also allied to various democratic theories including deliberative democracy. Since the term was first coined nearly a half century ago, political theorists have searched for an inclusive definition to explain theory and practice (Bessette, 1994). Deliberative forms of ▶ democracy include three essential characteristics: (1) they are public and open where citizens offer public reasons for their preferences, (2) they meet the condition of nontyranny whereby discussion and agreements function uncoerced, and (3) they meet the standard of political equality whereby basic procedural and substantive inequalities are eliminated (Conover, Searing, & Crewe, 2002). This act of participation involves both a public and private dimension emphasizing the need for a polity that is able to engage and hone internal reflection skills (Goodin & Niemeyer, 2003).

Forms of community participation through deliberation can be based on rhetoric, argument, testimony, storytelling, and greetings if used to induce reflection in a noncoercive manner to accommodate differences between citizens (Dryzek, 2000). The emancipatory power of public communication is also described as attainable through "communicative rationality" motivated by a sincere desire for consensus through mutual understanding, cooperation, and a common vision of community (Habermas, 1981). Deliberative forms of governance date back at least to Pericles (c.490– 429 BC) and Aristotle (384–322 BC) continuing with the emancipatory conceptions of individual sovereignty and ▶ liberalism through Jean-Jacques Rousseau (1712–1778) who in *The Social Contract* deemed public discourse essential to the formation of a "general will" (Book IV, Ch. 2.). John Stewart Mill (1806–1873) in *On Liberty* reflected on the importance of public discourse and outlined a philosophical rationale for "government by discussion" as a means of limiting human fallibility. A deliberative approach can take many forms and includes open, inclusive, and direct citizen interaction or more indirect methods, such as deliberative polling and citizen juries that seek to combine representative and participatory forms of deliberative democracy (Fishkin, 1993).

From a more sociological perspective, a relational approach to community participation emerges within central tenets of social capital and social movement theory. Social capital involves features of social organization such as networks, norms, and social ▶ trust that facilitate coordination, cooperation, and participation for mutual benefit (Putnam, 1995). Community participation is influenced by and in turn influences social capital in a community. Social movement theory is an interdisciplinary study within the social sciences to explain why social mobilization occurs, the forms under which it manifests, and potential social, cultural, and political consequences. Community participation is integral to social movement theory through the many progressive changes including the abolitionist, suffragette, and civil rights movements. Crossing political and cultural lines, contemporary community participation movements have involved globalization and ▶ solidarity issues.

The theme of common-pool resources and common property is also associated with community participation with its focus on social

arrangements that regulate the preservation, maintenance, and ▶ consumption of various public resources. Examples abound showing that common resources can be successfully managed without government regulation or privatization and involving a variety of cultural norms and spatial and temporal scales (Ostrom, 1990).

Examples and Best Practices

As a tangible example, the United States Constitution was established to provide for and protect certain inalienable rights, among them the right to peaceably assemble and to petition the government for a redress of grievances. Legal scholars posit that public participation and related issues of representation and accountability exist through an electoral system and check and balance by the separation of powers (Coggins, 1998). In the United States, case law supports the notion that abdication of legally sanctioned authority (termed subdelegation), federal statutes included, is inviolate (Barker et al., 2003). However, engaging diverse publics in ways that promote community participation does not necessarily have to move legal accountability for decisions away from government agencies to a more diffuse public entity. At the US federal level, the Federal Advisory Committee Act structurally limits the degree to which deliberative advisory groups influence federal agencies because of concerns of agency capture. However, agencies dealing with urban, education, environmental, and other policy areas have developed deliberative and participatory practices that often oriented around communities of interest. At a global scale, the United Nations Declaration of Human Rights, which holds freedom of association and freedom of assembly as central tenets, is an example of more universally recognized rights related to community participation.

Effective community participation requires certain necessary conditions or elements present. However, best practices for community participation are neither standardized nor relevant in every context. There are some underlying themes that do describe the potential for practicing community participation in an efficient and effective manner. For example, principles of good governance can encourage community participation through: (1) legitimacy and voice, whereby all citizens can influence decision-making, either directly or through legitimate intermediate institutions that represent their intention; (2) direction, whereby leaders and the public have a broad and long-term perspective on human development along with a sense of what is needed for such development; (3) performance, whereby institutions and processes try to serve all stakeholders with processes and institutions that make the best use of resources; (4) accountability and transparency, whereby decision-makers in government, the private sector, and civil society organizations are answerable to the public with a free flow of information that is directly accessible; and (5) fairness, whereby all citizens have opportunities to improve or maintain their well-being through legal frameworks that are just and enforced impartially (Graham, Amos, & Plumptre, 2003).

Enhancing public involvement in community planning and development efforts has been promulgated on developing and acquiring "buy-in" which signifies the support, involvement, or commitment of interested or affected parties to a proposal, plan, strategy, or decision. The term ownership or sense of ownership is increasingly cited as a critical element in determining the potential for buy-in and consequently public involvement in community planning and development efforts (Lachapelle, 2008). The term is characterized in organizational and management disciplines as psychological ownership involving feelings of responsibility and influence over processes and the resulting pride and identity invested in outcomes and purported to be a critical component of team building and collective action (Druskat & Pescosolido, 2002; Pierce, Kostova, & Dirks, 2003).

Threats to Effective Implementation

Threats to effective community participation are also described to be present and growing. Warnings of apathy in terms of civic responsibilities are not new and were forewarned by Tocqueville who predicted modernity, defined in part by administrations that discouraged ground level

self-government, would result in the atomization of the citizenry and would eventually lead to apathy and oppression. Henry Thoreau (1817–1862) also recognized pernicious qualities associated with public apathy and related contempt toward nature.

While technology and expert opinion are vital in social and political policy processes, criticism is growing of social and political initiatives that over-rely on experts at the expense of citizen engagement. The political shift in the United States, from the civic republic to what Poisner (1996) terms the procedural republic with an overemphasis on technocratic and bureaucratic institutions, has led in some cases to alienation, disconnectedness, and anonymity. Essayist-editor Walter Lippmann (1889–1974) described the public as a "bewildered herd" and "ignorant and meddlesome outsiders" who are incapable and disinterested in public affairs and argued for an elite class of insiders who are better able to analyze problems and propose solutions. Lippmann felt the "manufacture of consent" was necessary to address social ills since problems were too complex for most citizens to comprehend or address. Thus, citizens were to be governed by a specialized class composed of experts, specialists, and bureaucrats, a notion that continues to influence contemporary mass media, the public relations industry, and many social and political institutions (Herman & Chomsky, 1988).

The use of technology and science to inform policy making and educate citizens in community participation processes is vital. However, allegiance to "scientism" and the belief that science is inherently capable of solving almost all human problems serves as a mechanism of control as to whose voice is heard and considered legitimate, often at the expense of ordinary citizens who wish to participate in policy debates (Caldwell, 1990). Increasingly, citizens are apathetic and disengaged from the day-to-day business of governance and from myriad civic and social activities, particularly in the last half century (Putnam, 2000). Community participation is likely to be greatly affected by modern communications and information technology changes. Technology will, including new e-government initiatives, prove to further influence in myriad ways, community participation process, and outcome at various scales.

Cross-References

- ▶ Citizen Action Groups
- ▶ Civil Society
- ▶ Collective Responsibility
- ▶ Collectivism
- ▶ Communitarianism
- ▶ Community
- ▶ Consumption
- ▶ Democracy
- ▶ Freedom
- ▶ Governance
- ▶ Liberalism
- ▶ Liberty
- ▶ Solidarity
- ▶ Trust

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Community Participatory Action Research

▶ Action Research

Community Perceptions

▶ Neighborhood Perceptions

Community Perceptions in Durban, South Africa

▶ Durban (South Africa), Quality of Life

Community Planning

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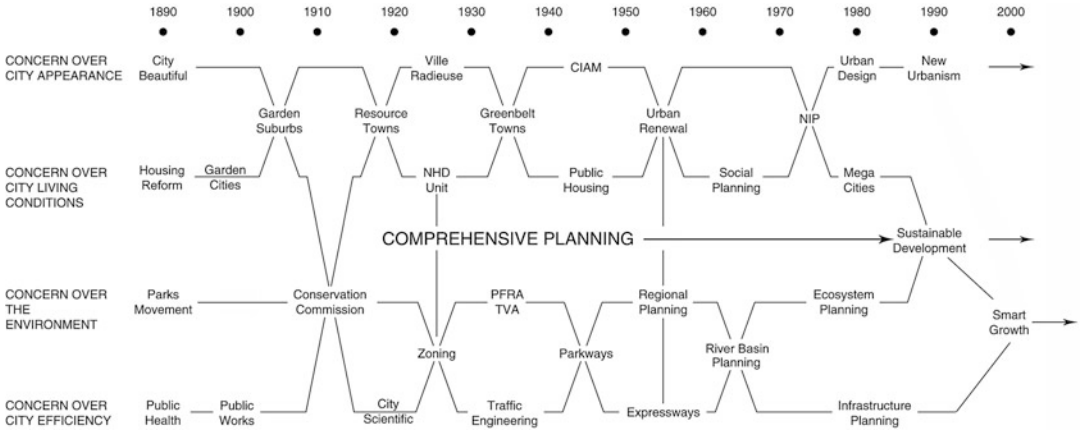
Synonyms

City planning (USA); Spatial planning (Europe); Town planning (UK); Urban and regional planning

Definition

Community planning is a form of urban and regional planning that incorporates social, economic, and environmental considerations to guide future development at the scale of neighborhoods, towns, cities, and regions.

The term community planning emerged from Canadian World War II reconstruction plans, as the federal government explored concepts for better community living in addition to the more traditional physical planning concerns incorporated in town planning (UK), city planning (USA), and urbanisme (France). "Community"



Community Planning, Fig. 1 This chart illustrates the evolution of community planning ideas in Canada during the twentieth century. Note the central role of preparing comprehensive land-use plans, which is a mandatory activity in almost every Canadian community as a result of provincial legislation. Planning evolved in different ways in other countries. For example, comprehensive planning is not mandated for most American cities (Source: Hodge & Gordon, 2008, Fig. 2.13)

was a useful modifier for planning activity for three reasons: (1) it implies that human needs will be integrated into planning for the built and natural environments; (2) it suggests that planning should consider quality of life at various scales from the neighborhood to the region; and (3) it conveys the idea that planning is an activity undertaken by the community and involves all who live in it (Hodge & Gordon, 2008, 10–14).

Description

Community planning incorporated concepts addressing four major streams of human settlement concerns (Fig. 1): (1) city appearance, (2) city living conditions, (3) the natural environment, and (4) city efficiency. Architects have often influenced planning concepts that address aesthetics, such as the City Beautiful movement, ▶ urban renewal, and ▶ urban design. Concerns over urban living conditions were addressed by social workers and housing reformers through the garden city movement, the ▶ neighborhood unit, and social planning. Planning for the natural environment involves landscape architects and ecologists in the parks movement, land conservationism, regional planning, and ecological planning. Finally, concerns over city efficiency were often addressed by engineers through public works, traffic engineering, and infrastructure planning.

Modernist planning and urban renewal come under attack during the 1960s, led by Jane Jacobs (1961). Her close observation of how cities work and the factors that contribute to safety and neighborhood quality grounded quality of life research in urban areas. Resistance to large-scale urban renewal for expressways and modernist housing projects led to increased ▶ citizen participation in the community planning process.

The 1970s and 1980s saw a quiet return of urban design that focused on ▶ quality of place, with San Francisco and Copenhagen as leading examples (Gehl, 2010). During the same era, community planning in Canada and Australia moved towards a widespread system of comprehensive ▶ land-use planning implemented by zoning bylaws. These plans were comprehensive because they covered an entire municipality, not because they addressed all elements of urban life; they incorporated public policies for social, environmental, and economic issues beyond the narrow property limits of the zoning bylaws that are the main planning instruments for many American cities.

The ▶ Brundtland Commission provided a new normative framework for ▶ sustainable development addressing social, environmental, and economic issues that was incorporated into the goals of community planning in the 1990s. The 1990s and 2000s also saw a higher profile for urban quality of life research and explicit adoption of high quality of life as an objective of many community plans (Dissart & Deller, 2000).

The quality of place rankings from Places Rated Almanac, the Economist Intelligence Unit, and Money Magazine were widely debated. Although their research methods have been criticized (Landis & Sawicki, 1988; Myers, 1988), cities such as Vancouver, Melbourne, Toronto, Sydney, Montreal, Ottawa, and Calgary consistently ranked near the top of many surveys, outperforming all American and most European cities on the limited set of indicators involved. These 1–5 million population cities appear to have found a quality of life "sweet spot" with good public services, strong economic opportunity, limited environmental degradation, effective local transportation, and housing prices that compare favorably with the larger global cities. All of these cities have been extensively shaped by community planning techniques in the postwar period. Although these cities allow many individuals to enjoy ownership of a single detached house and automobile, concerns remain about the large ▶ ecological footprint, social sustainability, excessive auto-dependence, and health effects of extensive ▶ suburbanization.

The quality of life and sustainable development objectives of the new millennium are supported by the policies informed by ▶ new urbanism, ▶ healthy communities, landscape ecology, and ▶ smart growth (Fig. 1). The best community plans now start with regional environmental analysis, extensive citizen consultation, and consensus-building about values and objectives. They may then develop a nested set of land-use, environmental, transportation, economic, cultural, and social service plans (Hack, Birch, Sedway, & Silver, 2010; Hodge & Gordon, 2008). After a century of practice, planners no longer believe that a well-designed built environment can produce a social utopia, but good community planning appears to contribute to improvements in the quality of life for many people.

Cross-References

- ▶ Brundtland Commission (World Commission on Environment and Development)
- ▶ Citizen Participation
- ▶ Garden City Movement
- ▶ Healthy Communities
- ▶ Neighborhood Unit
- ▶ New Urbanism
- ▶ Quality of Place
- ▶ Sustainable Urban Design
- ▶ Urban Design
- ▶ Urban Renewal

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Community Plurality

- ▶ Community Diversity

Community QOL Measures

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Synonyms

Community indicators; Community quality of life indicators; Quality of community life measures

Definition

Quality of life measurements are indicators of well-being for a community. A community is often defined as a geographical region, but it may also be a community of shared interests. Typically, the measurements would include a trend line for current and past quality of life issues in a wide range of areas including the economy, education, the natural environment, public safety, health, and the social environment. Often, the measurements are agreed upon with the participation of a diverse group of community members who help to chose, refine, and prioritize indicators. The measurements are then used by community members, government staff members, and elected officials to plan for social and political action to improve community outcomes.

Description

Community quality of life measures are used to describe what might be considered to be a good society or a good life in a community (Phillips, 2003). A community is often defined as a geographic region such as a city or town or a shared identity such as the Latino or African-American community. However, a community may also be defined as a group of people with sufficiently strong relationships that provide tangible support to each other and can act together (Ott, 2011).

Typically, quality of life measurements fall into 6–10 subject areas such as demographics, the economy, education, public safety, health, the natural environment, the social environment, politics/government, and arts/culture/recreation (Chambers, 2004). For example, a community quality of life measure for the economy might be the number of jobs that pay a living wage or the percentage of earnings that an individual pays for their housing. A community quality of life measure for the social environment might include charitable giving and volunteering, while a natural environment measure might be the number of vehicle miles traveled to work each day. Community quality of life measures provide a snapshot of community well-being. Most communities use community quality of life measures or indicators to assess the effectiveness of community planning efforts and programs (Sirgy, 2006). Often, a community will track these measures on an annual basis in order to show trends over time (Chambers, 2004).

According to Phillips (2003), community quality of life measures or what she calls community indicators are not new. The Russell Sage Foundation started conducting over 2,000 local surveys on education, public health, crime, and other quality of life issues in 1910 (Cobb & Rixford, 1998). The first survey was conducted in Pittsburgh, Pennsylvania, and local surveys became popular until World War II when economic indicators such as the gross national product became more popular (Phillips). In the 1960s, there was more interest in assessing local communities with indicators beyond traditional economic ones. By the 1970s, national and international governments and organizations, including the US Department of Health and Welfare, began to use community indicators. The city of New York launched a scorecard project in 1973 with indicators about education, well-being, and health (Phillips). In 1985, the Jacksonville Community Council Inc (JCCI) in Jacksonville, Florida, launched a comprehensive community

indicator project that used community quality of life measures (Swain, 2002). The Jacksonville approach was to work with residents and volunteers by starting with economic indicators and then expanding them to include indicators of a wide range of a community's quality of life. The indicator project was created with the help of a large task force of citizens and the financial sponsorship of the local chamber of commerce. When the Jacksonville project began, they developed a set of criteria with which to select indicators including importance, policy relevance, responsiveness, validity, ease of understanding, clarity, outcome oriented, asset oriented, suggestive of future conditions, available, timely, stable, reliable, and representative (Swain). JCCI has been consistently updating that project, and their 26th annual report was published in 2010. Other major cities and counties have used the JCCI model as a basis for their projects such as Truckee Meadows Tomorrow in Nevada, the Santa Cruz County California Community Assessment, and Our Kids Count in Halton Region Ontario Canada, all of which won first place awards from the Community Indicator Consortium, a network of researchers and practitioners in community indicator projects. The Council of Europe has worked with several cities to create indicator projects with community participation including Mulhouse in France, Wallonia in Belgium, and Timisoara in Romania.

Community indicator projects have proliferated in the last 20 years with more than 200 indentified projects in the United States alone (Smnolko, Strange, & Ventoulis, 2006). There has also been an increase in participation from local residents in defining and measuring well-being and quality of life (Dluhy & Swartz, 2006). There are several approaches to selecting quality of life measures including a bottom-up approach (as in the Jacksonville case) which was based on the belief that residents or citizens should participate in defining a community's quality of life (Sirgy, 2006). Citizen involvement in the process of defining, determining, and prioritizing quality of life measures can be a great strength because it makes citizens more invested in their communities and may increase their involvement in finding solutions for poor quality of life conditions (Phillips, 2003). Citizen involvement may also result in improved information about the community and in better planning and decision making for the future (Holden, 2009). The Truckee Meadows Tomorrow project included over 3,000 individuals, while the Santa Cruz County California project included approximately 2,000 individuals (Zachary, 2007). However, other projects take more of a top-down approach where consultants or government officials help to select or refine the quality of life measurements for a community, city, or town. For example, in the City of Santa Monica in California, their indicators were developed within city government and formally adopted by the City Council in order to have a direct relationship to public decision making (Swain).

The creation of community quality of life measures, however, is only one stage in a longer process of community improvement (Swain, 2002, Chambers, 2004, Zachary, 2007, Zachary, Brutschy, West, Keenan, & Stevens, 2010). The existence of community quality of life measures does not ensure that a community will use those measures to improve quality of life, unless there is a process in place to do so. Community quality of life measures are most useful when they are tied to public policy decisions and when the community feels an ownership of the indicators through citizen involvement (Swain). As shown on Fig. 1, measures are just one element of a community improvement effort which often consists of four major phases: governance/leadership, measurement selection/data collection and analysis, community action/advocacy, and sustainability (Swain, Chambers, 2004, Zachary et al., 2010). More recently, community indicator researchers and practitioners are adding a fifth phase known as alignment (Zachary et al.).

1. Governance-Leadership

   The community indicator process commonly starts with developing leadership and a steering group who design and oversee the process (Smnolko et al., 2006). About half of the 200 community indicator projects in the United States that were studied by Redefining

Community QOL Measures, Fig. 1 The five phases of community improvement efforts

Progress in 1997 had been started by government organizations (Smolko). Typically, a public agency or nonprofit organization will form a steering committee that includes key allies and champions and a lead agency that has the resources and willingness to coordinate the project and to help facilitate the change efforts that emerge from the project. Some best practices include creating a diverse and inclusive process that reflects the community's diversity and gives the project credibility with the community at large (Smolko). A successful community improvement effort needs strong leadership, often on the part of a diverse group of community leaders, government agency staff members, businesses, faith communities, nonprofit organizations, and elected leaders (Smolko, Chambers, 2004, Zachary et al., 2010).

2. Select, Collect, and Analyze Community Quality of Life Measures

The second phase is to work with the steering committee and community members to select, refine, and prioritize quality of life measures that are most important to community members. Some projects seek widespread community input so that there will be widespread ownership of the project and a large pool of residents who are familiar with the data and the quality of life in their region (Phillips, 2003; Zachary & Brutschy, 2011). There is an increasing focus on community members contributing to a larger vision of how they would like the community to look or the ultimate outcomes that they would like to achieve (Zachary & Brutschy, 2011). An approach known as results-based accountability (RBA), developed by Mark Friedman, is increasingly being used in community indicator projects in the United States, Canada, Great Britain, the Netherlands, Australia, and New Zealand (Friedman, 2005). The method invites residents to decide on community well-being in different domains and shifts the focus from inputs (dollars spent) to outcomes (the quality of life conditions they would like to achieve for children, families, and communities). This focus on outcomes also encourages an assessment of the assets within a community, not only the challenges. The Santa Cruz County Community Assessment Project in California, Our Kids Count in Halton Region Ontario Canada, and Community Indicators Victoria in Australia are examples of using RBA with residents to come to agreement on conditions of community well-being.

Most projects develop criteria for choosing indicators, including validity, reliability, timeliness, responsiveness, clarity, policy relevance, comparability, compelling, and representativeness (Chambers, 2004; Smnolko et al., 2006). Some communities use a voting system to rank indicators within each subject area. Once a community prioritizes a list of quality of life measures, then data are collected on those measures. Most community indicator projects use secondary data from local, state, and national sources such as the census, government agencies, health organizations, libraries, and schools. Some projects also develop primary data from telephone surveys or face-to-face surveys in order to get more recent data on subjects not collected by secondary sources (Chambers, Sirgy, 2006, Zachary, 2007). Telephone surveys can be conducted with a random sample

of residents, and face-to-face surveys are especially good in reaching low income and vulnerable populations since researchers can survey in specific neighborhoods (Zachary et al., 2010). Some communities use peer-to-peer surveys to increase the participation of specific communities such as peer-to-peer youth surveys about alcohol and drug behavior or homeless peer-to-peer surveys around the causes of homelessness (Zachary). The United States Department of Housing and Urban Development (HUD) cited peer-to-peer homeless research as a best practice for conducting a census and survey of the homeless population (Turnham, Wilson, & Burt, 2008).

After data are collected, they are analyzed by overall findings and often by geographic region, race, gender, ethnicity, income level, and/or age. Community members may also participate in data analysis so as to better understand some of the causes behind the trend lines. For example, people with disabilities may provide a unique understanding of data about other people with disabilities (Zachary & Brutschy, 2011). Data findings are then published and promoted, often through comprehensive reports, executive summaries, and on-line (Smnolko et al., 2006).

3. Community Action, Advocacy, and Public Policy

The third phase is the action phase, where community members and/or government officials and elected leaders develop action plans to improve the community quality of life measures. The process of developing community quality of life measures, researching them, and presenting them to the public can act as a catalyst for action. Community quality of life measures often reveal something that was formally unnoticed, prompting community leaders and legislators to address them (Smnolko et al., 2006). Successful community indicator efforts often bring community members together to prioritize issues and action plans (Smolko, Zachary, 2007, Zachary et al., 2010). A major critique of community indicator projects is that they have not been good at linking data to action (Sawicki, 2002). However, Dluhy and Swartz (2006) found that a key factor in successful indicator projects was being able to link them to budgets and planning or when they are embedded in a governmental or institutional structure (Hezri & Dovers, 2006). Zachary et al. (2010) provide a case study that shows how a community indicator project was linked to several community initiatives that made community improvements in the areas of health and education.

4. Sustainability

The fourth phase is to ensure sustainability of the community indicator effort by regularly reviewing the community quality of life measures, determining if new measures are necessary, updating the report, and generating new revenue sources(Smnolko et al., 2006). Government agencies and nonprofit organizations will use community quality of life measures to help evaluate and monitor the outcomes of government and program performance (Phillips, 2003). Some government agencies and nonprofit organizations that initiate community indicator projects will look to other funding sources to help share the burden of costs of the project in order to sustain the project. By including resident participation in all facets of the effort including indicator selection, data collection, data analysis, goal setting, and action planning, a community can help embed the project in a diverse group of local residents. Another step in sustainability is to evaluate the success of the overall community indicator effort itself, to determine who is using the results and for what purposes (Smnolko et al., 2006). This evaluation phase can allow for continuous improvement in both the indicator project and the action plans that emerge from the project.

5. Alignment

Recently, the concept of alignment has become more important in connecting community quality of life measurements at the regional level with community quality of life measurements at the program level

(also known as program performance measures). In other words, a community quality of life measure can measure community level outcomes, but it may also be aligned to program performance measures. For example, stakeholders in a community indicator effort might set goals for the entire community, such as decreased childhood obesity as measured by the body mass index (BMI), while an individual nonprofit organization (or a government program) might also focus on decreased childhood obesity among their own clients using the same BMI measurement.

The Community Indicator Consortium (CIC) has been focusing on efforts to align community quality of life measures and program performance measures. In 2006, the CIC convened a panel of experts in community indicators and government performance measures in Arlington Virginia. The information gathered at the conference was published in a report by the CIC (2007). In 2008, the CIC received a grant from the Alfred P. Sloan Foundation to continue CIC's work through developing a community of practice for integration. Some communities have already started to integrate community indicators with program performance measures. For example, Santa Cruz County, California, has been conducting an annual community indicator project since 1994. Data about community quality of life measurements have acted as a catalyst for countywide initiatives in the areas of health care, childhood obesity, and teen drug and alcohol use. Some individual nonprofit organizations have also launched efforts using those same community quality of life measures as program performance measures. For example, the community quality of life measures in the area of obesity include breastfeeding, physical activity, fruit and vegetable consumption, obesity, diabetes, and knowledge of the obesity campaign. The program performance measures are the same for the nonprofit organizations that promote decreasing childhood obesity (Zachary et al., 2010). The Santa Cruz County California project has developed a community improvement cycle that incorporates the new step of alignment which can be seen in Fig. 2. The cycle builds upon the previous work of JCCI in Jacksonville, Florida, and Redefining Progress (Chambers, 2004; Smnolko et al., 2006); however, it adds the new step of alignment and a more explicit focus on community action.

Future Research Needs

There are many handbooks that describe a vast array of community quality of life measures and how to choose appropriate measures (Chambers, 2004, Smnolko et al., 2006, Sirgy, 2006). However, there continues to be a lack of research about how those measurement outcomes become tied to social or political action in a community (Cobb & Rixford, 1998). More research is needed on how communities move from data to action. More research will also be critical for how communities work to align community quality of life measures with program performance measures.

In addition to new research about the alignment between program performance measurements and community quality of life measures, there will have to be more research into how local community quality of life measures may align with the national and international efforts to go beyond GDP (gross domestic product) to develop new quality of life measures at the nation state level. There is an increasing conversation among economists, statistical experts, and political leaders about going beyond GDP to measure conomic performance at the national and international levels. In 2008, French President Nicholas Sarkozy created a commission to investigate how to measure economic performance and social progress. One of the goals of the commission was to identify the limits of GDP as a way to measure the economy of nations and to consider additional ways to measure the economy that take into account sustainability and societal progress, especially in light of the environmental impacts of global warming (Stiglitz et al., 2009). One of the recommendations from the report that was produced by the commission suggested that it was time to move from measuring economic

Community QOL Measures, Fig. 2 The Santa Cruz County California community improvement cycle

production to measuring people's well-being. Further, it was suggested to use multiple measurements of well-being across various dimensions of people's lives including material living standards, health, education, personal activities including work, political voice and governance, social connections and relationships, environment (present and future), and insecurity of an economic and physical nature (Stiglitz et al.). The authors also recommended that surveys be designed to assess quality of life and how developments in one domain impact other domains (the issue of interconnectedness). Interestingly, for at least the last 25 years, local community indicator projects have been measuring quality of life across these multiple domains, using secondary data as well as primary survey data. It will be important to develop efforts to align local community quality of life measures to regional, state, and national quality of life measures.

In addition to new research about alignment, there is increasing attention to the concept of interconnectedness among community quality of life measures. Interconnectedness of quality of life measures means that one measure is closely linked to another measure. For example, individuals with higher education levels also have lower levels of chronic disease and early death. Recently, in the area of public health and global health, there has been a strong effort to highlight the social determinants of health and their relationship to health outcomes. Social determinants of health include such things as the environment, economics, transportation, housing, and civic participation. Public health professionals are researching the correlations between the social determinants of health and health outcomes and recognizing that unequal social conditions are largely contributing to inequities in health outcomes. Community quality of life practitioners and researchers are increasingly confronting the interconnectedness of quality of life measures in both indicator selection and in formulating action plans based on data findings.

More research will be necessary to focus on how communities are approaching interconnectedness and how it informs their action planning.

Cross-References

- ▶ Benchmarking
- ▶ Community Development
- ▶ Community Indicator Projects
- ▶ Community Indicators Consortium
- ▶ Community Life Measures, Quality
- ▶ Community Participation
- ▶ Community Planning
- ▶ Community-Based Participatory Research
- ▶ Determinants of Health, Social
- ▶ Happiness
- ▶ Happiness Measures
- ▶ Healthy Communities
- ▶ Indicators, Quality of Life
- ▶ Integrating Community Indicators and Organizational Performance Measures
- ▶ International Society for Quality of Life Research ISOQOL
- ▶ Life Satisfaction
- ▶ Quality of Community Life Measures
- ▶ Quality of Life
- ▶ Quality of Life Research
- ▶ Social Indicators Movement
- ▶ Social Indicators Research
- ▶ Subjective Indicators
- ▶ Well-being

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Community Quality of Life

- ▶ Community Satisfaction

Community Quality of Life and Third Places in the USA

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Synonyms

Communities, qol and third places in USA; Good neighborhood index; Index of neighborhood problems; Neighborhood

Definition

While a host of characteristics can be used to assess the quality of life in communities, Oldenburg (1989) identified a key concept, "third places," which refer to physical places that are not work and not home. These places have particular characteristics that make them important as places of interaction and beneficial to citizens and the community's quality of life as a whole.

Description

Oldenburg (1989) introduced the concept of "third places" to refer to physical places that are not work and not home. He posits that such places engender unique communication experiences and sociological benefits not only for community residents but also the community at large. The specific characteristics of third places include: (1) they are on neutral ground, so everyone's welcome, and no one plays "host"; (2) they are a leveler because people of different socioeconomic strata attend; (3) conversation is the main activity, so even though the setting may be a place for drinking, exercising, or playing a game, talking is always present; (4) they are accessible, with no physical, policy, or monetary barriers to entrance; (5) they are a home away from home, with "regulars" who find the atmosphere comfortable enough to "root" them there; and (6) the mood is playful, laughter is often heard, and wit is prized.

Thus, the presence of third places should enhance the quality of life in a community. Jeffres, Bracken, Jian and Casey (2009) conducted a national US survey to examine that relationship. They asked people to identify such places in their community through the following question: "What are the opportunities for communication in public places in your neighborhood, for example, places where people might chat informally or where friends and neighbors might go for a conversation?" Follow-up probes continue until there were no more answers. This produced a wide variety of "third places" that ranged from the most popular community centers, coffee shops and restaurants, to parks and malls. While a few relationships are found between population/diversity and the popularity of particular third places, the most important result confirms a hypothesized relationship between perceptions that third places are accessible in their community and the perceived quality of life. People were asked to "rate the overall quality of life available in the community where you live on a 0–10 scale, where 0 is the worst possible and 10 is the best possible." They also rated the quality of life available in their more specific neighborhood. Claiming there were no "third places" was negatively correlated with community quality of life assessment ($r = -.14$, $p < .01$) and neighborhood quality of life assessment ($r = -.20$, $p < .001$). Controlling for social categories (age, education, gender, white ethnicity, married marital status) reduced the magnitude of the relationships, but they still persisted.

Perhaps the most surprising finding was the number who could not think of any place in their community to go (29 % of respondents). The most frequently cited "third places" were coffee shops, mentioned by 13 % of the sample. For some communities in the study, streets and neighbors' yards represent opportunities to gather and communicate, suggesting that the "street corner society" still persists in some form. Libraries and senior centers are public meeting centers for groups that share some common ground, the

former cited by 7 % of the sample. Clubs and organizations, cited by 7 % of the sample, included restricted locations such as country clubs and homeowners associations as well as neighborhood groups, the Grange Hall, and civic clubs. Thus, while Americans may be "bowling alone" more often (Putnam, 2000), many still gather together for fellowship or seeking the common good. However, some of the "third places" are on commercial ground-shopping centers and malls, cited by 6 % of the sample, and hair salons and barber and beauty shops. Some 5 % cited schools or universities and similar numbers cited events rather than locations – neighborhood parties, cookouts, block parties, and barbecues. Two responses rejected the notion of "third places" completely, citing homes or "virtual spaces." Thus, some 8 % cited private spaces such as their neighbors' homes, or on their stoop or front porch. And "virtual" or mediated spaces were cited by 2 % of the sample: media in general, online, bulletin boards, newsletters, newspapers, and over the phone.

Where one lives does not seem to make much difference in the type of third places residents cite as locations where they go to talk. But a couple differences do appear; restaurants or cafes are cited least often by central city residents and most often by those living in small towns outside metro areas, with the others in between. And those living in central city neighborhoods, in the country, or in fair-sized nonmetro cities are more likely to claim there are no "third places" in their communities relative to respondents living in suburbs and small towns. Clearly, availability of particular opportunities varies with the nature of the area and the community, but people still find "third places" that welcome them for communication and spending ▶ leisure time.

The survey was conducted in 2005–2006, so the Internet was already well established but social media was just beginning to have an impact. Some aspects of communication over the Internet mirror one of the criteria for third places: the leveling nature of online communication (via anonymity), accessibility, "conversation" as the primary activity, and neutral ground. Since the data were collected for this study, social networking has grown dramatically as people have joined online communities. This is a new phenomenon that some will pit against face-to-face interaction in public spaces, but observations at coffee shops and similar third places show that many online participants carry on their "private" interaction in public spaces. In fact, the ability to access the Internet in public spaces has become an amenity to attract customers and residents across contexts (Hart, 2008; Wong, 2007).

As the Internet was beginning to take hold, Jeffres and Atkin (1996) noted the blurring lines among technologies and people's roles as senders and receivers of messages. The advance of mobile technology furthers this concept even more, but the continuing importance of physical third places and the tendency to use them as locations for "virtual interaction" suggest elevating our investigation beyond face-to-face and mediated distinctions to see how communication in all its forms fits into a community's quality of life. For many people, the quality of life may be tied to mediated interaction conducted alone in public settings – checking Facebook at coffee shops via cell phones or through available WiFi. And the "need to be connected," to be able to communicate at will with mobile communication, is likely to become an increasingly important element figuring in people's assessments of their community's quality of life.

Cross-References

▶ Community Quality of Life
▶ Leisure Time

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Community Quality of Life Indicators

▶ Community QOL Measures

Community Quality of Life Indicators

▶ Santa Cruz County (USA) Community Assessment Project

Community Report: Atlanta

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Definition

Atlanta, Georgia's capital and its largest city, is located in the north central portion of the state at the southern foothills of the Appalachian mountains (Cities and Counties: Atlanta). The city anchors the 28-county Atlanta-Sandy Springs-Marietta metropolitan statistical area (Updated statistical definitions of metropolitan areas).

Description

Approximately 250 miles/400 km from Savannah, Georgia, Atlanta is an inland port city with extensive road, rail, and air transportation infrastructure. The Hartsfield-Jackson Atlanta International Airport consistently ranks as the world's busiest airport in total passengers and operations (Kennedy, 2011; Airport traffic reports).

The total population living within Atlanta's city limits is estimated at 515,843 (2005–2009 American Community Survey) with a margin of error of +/−2, according to the US Census Bureau. Median age is 34 years, with 97,104 (27.7 %) of the population aged 25 and over holding a bachelor's degree. Males number 259,009 (50.2 %) and females 256,834 (49.8 %). The age distribution is 20.1 % aged 0–17 years, 71.4 % aged 18–64, and 8.5 % aged 65 and older.

The city's civilian labor force is an estimated 283,857 (67.2 %), with 9.2 % unemployed. Per capita income (in 2009 inflation-adjusted dollars) is an estimated $37,480; median family income is $62,904 (est.); and median household income is $50,243 (est.).

Issues in the areas of transportation, water, and education are considered the major indicators of Atlanta's future quality of life and overall well-being throughout the metro area. Public health and the impact of a significant influx of undocumented workers are also considered to have a major impact in this area.

Transportation Infrastructure and Commuting Patterns: The city of Atlanta partners with regional and state planning efforts to build and maintain a transportation infrastructure that will support the economic growth and vitality of Atlanta into the future. Planning activities center on the 18-county Regional Transportation Plan (Envision 6 Regional Transportation Plan), which includes a needs assessment report that identifies regional needs and major growth issues that will help inform strategies to meet the region's transportation needs (Atlanta Regional Commission, 2006). Additionally, the mayor of Atlanta is a member of the Atlanta Regional Roundtable, one of 12 regional bodies in Georgia that were brought together to create supplemental regional transportation plans to reduce traffic congestion conditional on the approval of a new penny tax by the electorate of each region (Atlanta Regional Roundtable).

A Georgia Tech study examining choices drivers make about their morning commute routes indicates that work schedule flexibility makes a difference in their choices and compares the commuters' sociodemographic characteristics and commute route-related attributes (Li, Guensler, & Ogle, 2005).

Public Health: A forward-looking "Health in all Policies" initiative to impact the redevelopment plans for closed military installation in Atlanta included a health impact assessment of the area. Defined by the World Health Organization as "a combination of procedures, methods and tools by which a policy, program or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population," the assessment will optimize the healthy impacts of the redevelopment by joining stakeholder interests and concerns with scientific evidence into the decision-making. Though relatively new to the United States, this initiative has been used widely in other parts of the world for more than 20 years (Georgia Health Policy Center).

Immigration and Employment: Between 1980 and 2000, metro Atlanta's immigrant population grew by 817 %, bringing significant changes to the urban area and raising heated debate regarding this population's effect on the labor market and urban economy. Understanding this effect on the urban low-skilled labor market, especially on low-skilled black workers, has important implications regarding possible policy options to expand employment opportunities for both groups (Liu, 2010).

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Community Resilience

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Definition

Community resilience measures the extent to which community capital can absorb immediate disturbances or chronic stressors as well as the community's adaptive capacity to self-organize into a stable, functional community system.

Description

This term addresses how resilience can be understood for a community given the many disasters and pressures that may face it. General resiliency theory has roots in measuring social-ecological systems and is defined by the amount of change a system can absorb and still maintain a well-functioning system as well as its ability to adapt and emerge stronger into a new system (Folke et al., 2002; Newman, Beatley, & Boyer, 2009; Pickett, Cadenasso, & Grove, 2004; Resilience Alliance, 2010). By applying resiliency theory to local communities, more nuanced characteristics can be measured and explored which reveal attributes important to community resiliency. One Phoenix, AZ-based application called "Health in a New Key" developed by the Arizona Community Foundation offers some general lessons concerning community resilience. Researcher R. A. Hughes describes these as connecting civic and political institutions; creating community wells of information, services, and social connections; leveraging local culture; and building strong feedback loops (as cited in Zautra, Hall, & Murray, 2008, p. 138). Some of the general principles that can help establish and reinforce these characteristics include efficiency, interdependency and redundancy of community systems, diversity of resources, social capital and trust, empowerment, and education about community assets.

There is a focus on social aspects of community resiliency as the relationships formed between people that live near each other is diminishing (Lovenheim, 2010). With families living farther away from each other and communities continuing to face a variety of complex, external threats, communities must find ways to encourage safety and well-being for residents without relying on outside institutions (Armour, 2010, p. 35). This sense of security among residents of local communities requires trust. Trustworthiness, honesty, and a loose understanding of reciprocity are the key ingredients to forming social capital (Putnam, 2000, p. 134–147). If people have trustworthy relationships, they can rely on each other more readily to address problems within their community. In addition, community members have an opportunity to build social capital through simply networking with each other. The social networks between people of a community offer opportunities to become educated about individuals' strengths and assets which can be used to address problems facing the community.

In fact, a community's assets are what enable it to absorb the internal and external pressures that will test its resiliency. Having a diversity of community stock such as environmental capital, human capital, social capital, cultural capital, structural capital, and commercial capital will strengthen a community's resiliency (Callaghan & Colton, 2008). Because these different types of stock are interdependent, it will help to be educated about how they may reinforce each other. For example, a historic church may be defined as structural capital due to its physical and aesthetic qualities but also as cultural capital due to its importance as a meeting place for those in the community with shared beliefs, traditions, and values. It is also important to understand where deficiencies occur. Through understanding community stock in terms that go beyond economic resources, deficiencies or vulnerabilities may become clearer for the community as a whole.

In addition, it is helpful to understand how community capital is linked and where overlap may occur in order to produce plans to prepare communities for adaptation to future potential problems. Through "planning and developing strategies that minimize vulnerabilities," "developing communication and response systems" (Campanella, 2006), "supporting government/private partnerships and independent initiatives that create social support" (Tobin, 1999), and "developing strategies that diversify risk across space, time and institution" (Hultzman & Bozmoski, 2006), community resiliency can be maximized (as cited in Callaghan & Colton, 2008). Connecting resources and preparation for perceived threats then become just as important as having the resources themselves. Without the

self-organization skills to adapt quickly and efficiently to stressors, a community may not respond resiliently.

Community resilience can be tested both by crises and chronic pressures. Disasters such as hurricanes, bombings, and fires are crises in which survivors of communities react and adapt in a way to demonstrate resiliency or vulnerability. An example of a community that adapted resiliently is a Vietnamese community in New Orleans East which used the social network and leadership of the Vietnamese Catholic church to self-organize and reestablish community in the aftermath of Hurricane Katrina more efficiently than the majority of communities in New Orleans (Hauser, 2005; Hill, 2006; Joe, 2005; Li et al., 2008; Zucchino, 2005). Chronic pressures such as economic decline, environmental degradation, and socially related pressures such as racism are another way to test the resiliency of a community. The Dudley Street Neighborhood Initiative is an example of a community which adapted to become more empowered and self-organized to develop affordable housing, decrease vacant buildings, and fight excessive littering within their neighborhood (Chaskin & Garg, 1997; Scalet, 2006). Both cases indicate that resiliency is not defined by assets alone but by the formed network and connection between these resources to adapt when necessary and remain strong.

Discussion

How to measure community resiliency and the attributes it should include in this measurement is debatable. Zautra, a community resiliency scholar, defines a resilient community as "one that examines the long-term changes within the society, warding off ill outcomes before they arrive and enhancing quality of life over previous generations" (Zautra et al., 2008, p. 142). Resilience is then not simply an ability to sustain but to have some measurement of quality of life within a given community which can be interpreted in a variety of ways. However, a resilient community is "inextricably linked to the condition of the environment and the treatment of its resources; therefore the concept of sustainability is central to studies of resilience" (Cutter et al., 2008, p. 601). Resilience must take into consideration adaptation within an ever-changing system yet also promote achieving long-term sustainability.

In addition to what should be measured in understanding community resilience, how it should be measured and developed is of equal importance. There is a need for public participation at the local level in the creation of these metrics (Phillips, 2003; Pickett et al., 2004; Sawicki & Flynn, 1996). Because education and social connectedness are important attributes of community resiliency, defining how it will be measured should start using a grassroots approach and involving the community from the beginning as true stakeholders and drivers of this process.

Cross-References

▶ Community Participation

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Community Satisfaction

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Synonyms

Community quality of life

Definition

Community has been described as an original phenomenon, namely, the local unity of a group of human beings who live their social, economic, and cultural lives together and jointly recognize and accept certain obligations and hold certain standards of value in common. Satisfaction can be defined as the discrepancy between aspiration and achievement, ranging from the perception of fulfillment to that of deprivation. Satisfaction is highly personal, heavily influenced by past experiences and current expectations. Finally, we can say that the term community satisfaction refers to people's subjective evaluation of their own well-being as measured by how well their local community meets their personal needs.

Description

Simply stated, community satisfaction refers to people's subjective evaluation of their well-being as measured by how well their community meets their needs (Matarrita-Cascante, 2009). To better understand community satisfaction, the initial task is to define the underlying components. Three interrelated ideas will be explored: (1) community, (2) satisfaction, and (3) community satisfaction. Then a discussion of what researchers have learned and a conclusion follows.

What Is Meant by Community? Social scientists have come to use the term community in a variety of ways (McMillan & Chavis, 1986). Contemporary notions of community revolve around the concepts of community of place and community of interest (Heller, 1989). The first is defined by geography or physical territory and the second by personal relationships (Cochrun, 1994). Rigby and Vreugdenhil (1987) suggest that essential to the concept of community is a group of people sharing a sense of place and living within a defined geographical area, whereas Peterson, Speer, and McMillan (2008) emphasize that community is composed of people in communication who have common interests, ties, or shared emotional connection. Thus, Konig (1968) was quite right when he suggested that community is an original phenomenon, namely, the local unity of a group of human beings who live their social, economic, and cultural lives together and jointly recognize and accept certain obligations and hold certain standards of value in common.

What Is Meant by Satisfaction? Satisfaction is defined by the Oxford Dictionary (Oxford University, 2011) as fulfillment of one's wishes, expectations, or needs, or the pleasure derived from this. Expanding on this definition, Campbell, Converse, and Rodgers (1976) and Campbell (1981) believe that satisfaction can be viewed as an act of judgment, a comparison between aspiration and achievement, ranging from the perception of fulfillment to that of deprivation. They additionally feel that satisfaction is highly personal, heavily influenced by past experiences and current expectations. Theoretically, the most probable cause of reported satisfaction or dissatisfaction is the extent to which unfilled needs exist (Morris & Winter, 1978). Relating the idea of satisfaction to the environment, Rigby and Vreugdenhil (1987) equate the term satisfaction with well-being and livability. In conclusion, Rojek, Clemente, and Summers (1975) suggest that satisfaction with a particular environment is dependent on two key assessments: (1) the manner in which the attributes are perceived and (2) the standard of reference against which the attribute is measured.

What Is Meant by Community Satisfaction? The following provides a historical overview of the concept of community satisfaction. Vernon Davies (1945) was one of the first to approach community satisfaction as a topic of sociological research by developing a schema of 42 positive and negative values that were measured using Likert scales. Davies' model of community satisfaction was an operationalized construct, resulting in a single score. Much of the subsequent research followed Davies method, focusing on the determinants of community satisfaction with little attention to the nature of community satisfaction. This method of inquiry poses two problems: (1) the terms community and satisfaction may mean any number of things to the residents (Deseran, 1978) and (2) many indicators may measure the same thing, exaggerating the overall importance of the factors (Brown, 2003b).

In the 1960s, researchers began to express concern about the prior multi-item methods used in the exploration of community satisfaction. Researchers began using a smaller number of items to measure community satisfaction (Gulick, Bowerman, & Back, 1962; Hollingshead & Rogler, 1963). This approach minimized the problem of overweighting of similar items, but it still left the researcher unsure of what the respondents were thinking when asked how satisfied they were with their community. The lack of precision led researchers to the understanding that any research on community satisfaction is ultimately subjective. Marans and Rodgers (1975) clearly capture this new understanding in summarizing their findings: "we can see that the objective characteristics of a person's situation cannot be equated with how he feels about the situation" (p. 303). They further argue that satisfaction is dependent both upon the objective circumstances in which individuals find themselves as well as the sets of values, attitudes, and expectations they bring into the situation. Both Marans and Rodgers (1975) and Campbell et al. (1976) proposed models of environmental satisfaction where community satisfaction was one domain among many affecting persons in their daily life (a point reinforced by Campbell,

1981). The models show how objective environmental attributes lead to perceptions of environmental attributes, then to assessments of environmental attributes, and, eventually, to satisfaction levels. These models were instrumental in providing direction to subsequent research. In addition, the use of more sophisticated statistical analysis techniques made it easier to handle multiple measures of satisfaction.

Drawing from the work of Erving Goffman (1974), Deseran (1978) provided a new perspective on community satisfaction. He argued that people define the situation in which they find themselves and act accordingly. In his view, individuals experience community as an objective reality; at the same time, they are subjectively creating it, i.e., it is an emergent, multidimensional phenomenon, which is a function of opportunities and access present in their community. To say it is emergent means that community satisfaction cannot be objectively measured across all communities, places, and times. It emerges from the social interaction of people in a particular place and time, so emergent outcomes are not entirely predictable, but some patterns can be identified, because people typically act within known and accepted social rules and norms (Brown, 2003b). Thus, by the 1980s, it was well accepted by researchers that community satisfaction dealt more with residents' subjective interpretations of their objective conditions than with the objective conditions per se. The advent of geographic information systems (GIS) has contributed to our understanding of the relationship and impact of the characteristics of the environment and people's assessment of their life satisfaction by allowing the integration of subjective survey-driven individual assessment with the objective characteristics (physical, demographic, and socioeconomic) of the surrounding physical environment (Marans & Stimson, 2011), as well as the effect of the size of environment (community) (Kweon & Marans, 2011). To summarize, Heaton, Fredrickson, Fuguitt, and Zuiches (1979) suggest that measuring community satisfaction may be understood as tridimensional, composed of (1) factual knowledge to provide the descriptive content (2) evaluative direction to suggest personal appraisal of a situation, and (3) salience to indicate the relevance of a circumstance to the actor. However, Chipuer and Pretty (1999) warn "against making assumptions about similarities between geographical and relational communities because of different cultural and geographic influences on the notion of community" (p. 645). Hillier (2002) suggests that the two types of communities, of place and of interest, rarely overlap today. The circumstances of the past when the two coexisted are not as common today. Thus, for many people, the important community may be the community of interest.

What Have Researchers Learned About Community Satisfaction? The research has continually documented that persons, including many who live in what might be called inferior environments, tend to be fairly satisfied with their communities (Campbell et al., 1976; Gulick et al., 1962; Hollingshead & Rogler, 1963) this has been attributed to subjective well-being homeostasis (reversal towards the mean) by Cummins, Lau, and Davern (2012). Further, the proportion of residents in rural areas who are satisfied with their community tends to be higher than among urban dwellers (Campbell, 1981; Marans & Rodgers, 1975; Theodori, 2001). Factors found to be related to community satisfaction include age (Campbell et al., 1976; Filkins, Allen, & Cordes, 2000; Goudy, 1977; Marans & Rodgers, 1975; Rojek et al., 1975) density (Baldassare, 1986) duration of residence (Brown, 1993; Campbell et al., 1976; Marans & Rodgers, 1975; Miller & Crader, 1979; Rojek et al., 1975) education (Bradburn, 1969; Campbell et al., 1976; Filkins et al., 2000; Marans & Rodgers, 1975; Miller & Crader, 1979) family size (Miller & Crader, 1979) gender (Filkins et al., 2000); income and occupational status (Bradburn, 1969) migration attitudes (Schulze et al., 1963); migrant status (Stinner & Toney, 1980) proportion of friends living in the community, proportion of adults known in the community, and organizational membership (Goudy, 1977) satisfaction with employment (Brown, 2003a; Filkins et al., 2000); social participation, residential mobility,

and residential satisfaction (Fried, 1984) social/spiritual satisfaction (Filkins et al., 2000) socioeconomic status in the community (Fried, 1984) and individual experience with family (Toth, Brown, & Xu, 2002).

Conclusion

Overall the researchers have produced mixed findings about the relative importance of these factors as predictors of community satisfaction. For example, Zehner and Chapin's (1974) study of Washington, D.C., area communities found that service ratings only accounted for 18 % of the variance in community satisfaction, and in a nationwide study by Campbell et al. (1976), no more than 19 % of the variance in community satisfaction was explained by nine service attributes. Even after including personal characteristics of respondents, the explained variance was no more than 21 %. Thus, without the inclusion of respondents' evaluations of the variables that are of greatest salience to their reported satisfaction levels, few studies will explain greater portions of variance than those reported by Goudy (1977) in his examination of community satisfaction, i.e., 40 %. In other words, community satisfaction is a concept of such breadth and depth that it encompasses evaluations of social variables and local services but is not fully accounted for by these items. Early on, Fried (1984) concluded that "community satisfaction is neither a global overarching orientation nor a simple summation of individually varying concrete experiences. Rather, it is a coherent but differentiated set of community orientations, each based on several interrelated and possibly mutually compensatory community experiences" (p. 68). He identified four distinct factors of local community satisfaction: (1) residential satisfaction (housing and neighborhood), (2) convenience satisfaction (availability of local resources), (3) interpersonal satisfaction (neighborhood interaction, friends), and (4) political satisfaction (delivery of services). Further, although there are similarities across different socioeconomic groups, they may differ in the importance of the factors.

There are various concepts that have been related to community satisfaction in the literature – neighborhood and community attachment, community identity, social capital, and life satisfaction. Throughout the literature on community identity, there is an essential division between territorial/locality-based conceptions of community and those concerned with social/network relationships (Puddifoot, 1995). Community and neighborhood attachment can be viewed as multidimensional concepts composed of attitudes, neighboring, and problem-solving within a particular geographical location (Brown, 2003a). Social capital is a concept which refers to connections within and between social networks (Putnam, 2000). Finally, Sirgy and Cornwell (2002) suggest that satisfaction with the social features of neighborhoods seems to affect life satisfaction through community satisfaction. Specifically, satisfaction with the neighborhood social features (such as social interactions with neighbors, people living in the neighborhood, ties with people in the community, crime in the community, race relations in the community, outdoor play space, and sense of privacy at home) contributes significantly to one's overall feelings about the community (community satisfaction).

Cross-References

- ▶ American Demographics Index of Well-Being
- ▶ Community Satisfaction
- ▶ Life Quality Index
- ▶ Quality of Community Life Measures
- ▶ Quality of Life
- ▶ Quality of Life Index

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Community Special Events

▶ Community Festivals

Community Studies

▶ Alberta Survey
▶ Winnipeg Area Study

Community Support

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Synonyms

Social support

Definition

It is the social support from community ties and organizations. Neighbors, neighborhood associations, and other social groups in the community, schools, the parish, or community social services are examples of community sources of support.

Description

Social support from close and intimate relationships has been the main focus of attention in social support literature. However, social support is also available from other groups and the larger *community* (Adelman, Parks, & Albrecht, 1987; Caplan, 1974; Gottlieb, 1981; Herrero & Gracia, 2007; Lin, 1986; Wellman & Wortley, 1990). According to an ecological framework of analysis (Bronfenbrenner, 1979), different sources of support can be identified in the social environment. For example, Gottlieb (1981, p. 32) proposed different settings, corresponding to three ecological levels of analysis in which social support processes may take place: macro (*social integration*/participation approach), mezzo (social network approach), and micro (intimate relationship approach), in which the macro level refers to people's involvement with institutions, voluntary associations, and informal social life of their communities. Community support would correspond to the most external of these levels, as they are potential sources of support. Likewise, Lin (1986) argued that social support conceptualizations should reflect three different layers of social relations: intimate and confiding relationships, the social network, and the community. The outer and most general of these layers consists of relationships with the larger community (e.g., church, school, clubs and services, political and civic associations) and would reflect the extent to which the individual identifies and participates in the social environment at large (Lin, 1986, p. 19). In this regard, the *sense of belonging* and integration into a community is relevant for social support because the stronger this feeling, the more probable a person would expect significant help from others (Dalton, Elias, & Wandersman, 2001). Communities include voluntary organizations (e.g., religious, cultural, sports, neighborhood, or civic groups) as well as organized services (e.g., social-service agencies, family services, self-help, or *support groups*) in which people spend part of their time. These community settings can provide new information and resources, promote interdependence and

mutual commitment, and, therefore, may become important sources of support (Dalton et al.; Herrero & Gracia, 2007; Lin, Dumin, & Woelfel, 1986; Shinn & Toohey, 2003). The concept of community support is closely link to the idea of support from weak ties (Granovetter, 1973), a concept that covers a wide range of potential supporters who lie beyond the primary network of family and close friends (Adelman et al., 1987). The community provides a network of weak ties that is likely to provide information and resources not redundant with the information and resources available in the network of strong ties. Both networks are used but probably used for different purposes (Wellman, 1981; Wellman & Wortley, 1990). According to Wellman, "weaker ties often provide more diverse support because they access a greater number and variety of social circles... weak ties can be unique channels to new, diverse sources of information, often proving more useful than strong ties... with their links to other social circles, such weak ties can also introduce an individual into these circles as social situations change" (p. 186).

Community support is a concept also strongly linked to community psychology. As Barrera (2000) noted, social support became a central concept in community psychology, as it captures "helping transactions that occur between people who share the same households, schools, neighborhoods, workplaces, organizations, and other community settings" (p. 215). In this sense, the concept of community support is also connected to many fundamental concepts in community psychology. In their analysis of these connections, Herrero and Gracia (2007) posit that there is an underlying element of support in a diversity of concepts traditionally used in community research. For example, in the concept of *sense of community*, the feeling of interdependence with others, the perception of belongingness, and the feeling that one is part of a larger structure are also maintained by the belief that the needs can be met through the resources and cooperative behavior within the community and by the emotional support stemming from community living (McMillan & Chavis, 1986; Sarason, 1974). Another concept that can be linked to community support is the concept of neighboring, which also reflects social interactions and exchange of support between neighbors and captures the sense of support and mutual aid which is also an essential aspect of being part of a community (Skjaevelan, Gärling, & Maeland, 1996; Unger & Wandersman, 1985). Community support is also close to the concept of *social capital*, as community ties and participation in voluntary organizations and groups make up much of the social capital people use to deal with daily life, seize opportunities, reduce uncertainties, and achieve for social support. Social capital literature emphasizes the importance of communities to access and use resources (material, informational, or emotional) for mutual benefit through social ties, groups, and organizations (Coleman, 1988; Lin, 2001; Putnam, 2000).

Research on the relationships between community support and *well-being* has received little attention as compared to the large body of literature linking support from intimate and close relationships and psychological well-being. Comparatively, few scholars have recognized the importance of this level of analysis in social support research (e.g., Caplan, 1974; Dalton et al., 2001; Gracia & Herrero, 2006; Haines, Hurlbert, & Beggs, 1996; Lin, Dean, & Ensel, 1986; Shinn & Toohey, 2003; Turner, Pearlin, & Mullan, 1998; Turner & Turner, 1999). However, support from community sources is also important for mental health and can be considered an important route to psychological wellness (Cowen, 2000). In line with research linking indicators of community life (e.g., sense of community, neighboring, *community participation*), to psychological well-being (e.g., Chavis & Wandersman, 1990; Davidson & Cotter, 1991; Farrel, Aubry, & Coulombe, 2004), concepts closely linked to that of community support, available research shows also a positive association between community support indicators and psychological adjustment, even after controlling for levels of support from close and intimate relationships (Gracia & Herrero, 2006; Herrero & Gracia, 2007). This is, however, an underresearched area, and clearly more research is needed on issues such as differences between available, appraised, or received community support;

its determinants; their relationship to psychosocial adjustment; and whether the mechanisms explaining its potential benefits parallel those discussed in social support research on close and intimate relationships and its impact on *health* and well-being. The measurement of support from community ties and organizations is also an area clearly in need of further development, as few psychometrically sound instruments are available (e.g., Herrero & Gracia, 2007; Lin, Simeone, Ensel, & Kuo, 1979; Lin et al., 1986).

Cross-References

- ▶ Community Cohesion
- ▶ Community QOL Measures
- ▶ Community Satisfaction
- ▶ Community Well-Being Index
- ▶ Neighborhood Participation
- ▶ Neighborhood Perceptions
- ▶ Social Participation

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Community Surveys

▶ Alberta Survey
▶ Winnipeg Area Study

Community Values

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Synonyms

Attachments, social; Collective beliefs; Cultural life; Identity, social; Social codes; Social ideas; Social life; Social norms

Definition

What are Values?

To understand community values, it is first important to define *values*. As used in the field of psychology, values refer to abstract, emotionally valenced, higher-order beliefs that exist along a continuum of importance and guide more specific attitudes and behaviors (Rokeach, 1973; Schwartz, 1992). Three implications of this definition are that (1) values have an emotional and cognitive dimension, (2) there are many types of values and variations in the importance people ascribe to them, and (3) values are relevant for understanding people's attitudes as well as their actions. Values cannot be directly observed. Rather, they are made evident in the actions that express people's preferences in a given sociocultural and temporal context (Dewey, 1944). One fundamental value dimension entails a distinction between valuing self-enhancement, or pursuits that enhance the self (e.g., achievement, power, hedonistic pleasures), and valuing self-transcendence, or endeavors that benefit other people and the common good (e.g., tolerance, environmental preservation, family welfare; Schwartz, 1992). Whereas values that emphasize benefits to oneself or to others are not necessarily mutually exclusive, research across disciplines has found that these value dimensions tend to oppose one another within and across individuals, cultural groups, and nations (Inglehart, 1997; Schwartz, 1992; Triandis, 1995). In other words, endorsing values that enhance oneself diminish investments in values that transcend the self and benefit others.

Values Versus Norms

Sociologists often discuss norms and values interchangeably (Hitlin & Piliavin, 2004), yet a distinction between values and norms is important for understanding community values. Specifically, values are typically considered to be personal ideals and are measured as an individual-level construct. Norms can be conceptualized as shared values within a group that exert social pressure to believe or act in ways consistent with these shared priorities (Marini, 2000). Of course, values and norms are constantly shaping each other. For instance, a member of a group may eventually adopt a group norm as a personal ideal. Conversely, through discourse and other actions, individuals with strongly held values may influence the shared values of their social, community, or cultural group.

What are Community Values?

Using these definitions as a background, community values can be understood at the personal as well as the community level. For individuals, community values are a set of priorities that reflect one's feelings of connection to a community. Individuals are more likely to adopt the values of a community as their own to the extent that they identify with a particular community. At the individual level, how one defines his or her community – such as who is included in one's community and what are the geographical or philosophical boundaries – is a personal matter. Elements that inform one's community values include membership and belonging, trust in others, and sense of responsibility. First, belonging to something larger than oneself is a fundamental human need (Baumeister & Leary, 1995), and when individuals feel that they are respected members of a group with equal rights imparted through membership, they are more likely to exhibit positive feelings toward community (Mcmillan, 1996) and an ethic of civic and moral responsibility (Flanagan, Cumsille, Gill, & Gallay, 2007).

Second, community values are linked to social trust, a positive belief in humanity, and a belief that most people are fair, helpful, and trustworthy. The association may be reciprocal: individuals with a disposition to trust others may feel a sense of common purpose with fellow members of their community (Uslaner, 2002). Likewise, community solidarity may boost one's faith in humanity and inclinations to give others the benefit of the doubt (Flanagan, 2003; Flanagan & Stout, 2010). Thus, individuals' feelings of belonging and social trust in their community context may help to foster a certain type of community values, that is, self-transcendent values.

A third element that is important for understanding community values is an ethic of responsibility. From this perspective, social responsibility, or priorities of helping others and contributing to society (Gallay, 2006), is incorporated under the umbrella of individual-level community values. Notably, community values share theoretical roots with psychological sense of community as both are grounded in belonging, reciprocity, and responsibility (Nowell & Boyd, 2010).

Importantly, community values are transactionally linked to citizenship. Full participation as a citizen is characterized by membership, rights, and responsibilities (Sherrod, Torney-Purta, & Flanagan, 2010). Likewise, community values develop in concert with one's sense of membership (and equal rights thereof), social trust, and social responsibility. As noted above, many theorists proclaim that values guide behaviors, and likewise, community values should motivate community actions. Others have suggested that associations between values and actions in the civic domain are bidirectional (Youniss & Yates, 1997). For some psychosocial indicators (e.g., psychological empowerment), evidence suggests that a stronger causal path exists from civic behaviors to beliefs, rather than vice versa (Christens, Peterson, & Speer, 2011). Such findings indicate that actions taken in partnership with fellow citizens and in contexts like community groups and social justice organizations can further the development of individuals' community values.

At a broader level, community values can refer to the shared beliefs held by individuals in a social group or specified geographical location. Thus, community values as macro-level phenomena function as community norms, which serve to set expectations for social behavior and standards for how others should be treated. The valence of a community's shared values matters tremendously. For example, groups may value individualistic pursuits, prioritize power differentials, and condone intolerance; alternatively, groups may espouse shared values of service to others, celebration of diversity, and social justice. A community's shared values shape local policies, interactions among members, and individuals' actions. Importantly, those shared values can change based on the collective choices of their members. In other words, it is individuals working together in communities that create a community's shared values. When focused on self-transcendent themes, community values have the potential to redress inequality and oppression.

Although individuals also have personal capacity for meaningful engagement, social change is enacted through collective action (Stokols, Misra, Runnerstrom, & Hipp, 2009). Thus, positive community change comes from individual agency and the collective co-creation of community values among members.

Description

There is a wide range of domains for which community values can be relevant. We focus our discussion on the implications of community values for quality of life, and we also highlight the role of social forces such as technology and power in changing community values and actions.

Links to Quality of Life

Community values may be linked to well-being through the fulfillment of needs. Various theories suggest that values are pursued in order to enhance the self-system and fulfill psychological needs (Inglehart, 1997; Rokeach, 1973; Schwartz, 1992). In particular, self-determination theory is a needs-based theory of human motivation, and it posits that intrinsic motivations are more beneficial for individuals' well-being than are extrinsic motives (Kasser, 2002; Ryan & Deci, 2000). Intrinsic motivations involve pursuing activities because they are interesting and satisfying on their own rather than to meet external goals or pressures. Intrinsic motivations include (but are not limited to) values of social connection and community contribution. Self-determination theory argues that intrinsic motivations facilitate the fulfillment of three basic psychological needs: autonomy, competence, and relatedness. These needs appear to be crucial for optimal functioning and personal well-being (Ryan & Deci, 2000). Of course, external motivations can lead to actions that benefit communities just as intrinsic motivations include other pursuits like achievement that are not necessarily related to community contribution. Our point is that when individuals value making positive contributions to society, these values are intrinsically motivating. In keeping with self-determination theory, then, when individuals value positive contributions to community, their well-being should increase through the fulfillment of key personal and social needs.

More broadly, social connections have also been positively linked to well-being. The socioemotional benefits of supportive social relationships have been documented for adolescents (Mooney, Laursen, & Adams, 2007) as well as adults (Pruchno & Rosenbaum, 2003). Relationships with others may also be beneficial for physical health: experimental and quasi-experimental studies have provided strong empirical evidence for a causal link such that social relationships impact health (House, Landis, & Umberson, 1988). According to social capital theory, social relationships are created and maintained in formal institutions as well as through informal interactions in community contexts (Coleman, 1988; Putnam, 2000). Thus, community involvement and working toward shared community goals could have a dual-pronged effect of meeting community needs while also enhancing individuals' social connections. A growing body of literature is converging on the idea that community involvement is positively associated with psychological well-being and physical health (e.g., Piliavin & Siegl, 2007). However, the direction of effects is less clear, that is, whether healthier people are more likely to get involved in their communities or whether community involvement promotes health, or both.

Furthermore, individuals can collectively act on shared values to improve the conditions of their communities. Studies have recognized the role of community values in the domains of education (Glaeser, Ponzetto, & Shleifer, 2007), health care (Kreuter, 2005), and environmental preservation (Wray-Lake, Flanagan, & Osgood, 2010). For example, Prilleltensky (2010) links the community value of child wellness (which includes physical and emotional well-being as well as access to education and other opportunities) to the imperative of social inclusion of young people in social policies and as full members of communities. In other words, valuing child wellness at the community level is

a necessary prerequisite to taking seriously the needs and the contributions of young people. Young people themselves play a unique role in enacting positive social change. Given their stage in life, adolescents and young adults tend to have a "fresh take" on society, infusing social movements with new ideas, energy, and action (Mannheim, 1952). Scholars have documented myriad instances around the world in which youth-led activism has led to improved social conditions (Sherrod, Flanagan, Kassimir, & Syvertsen, 2006).

Role of Social Forces

Values and norms are shaped by, and expressed in relation to, social forces. For example, technological innovations are exerting influence on contemporary social structures by intensifying consciousness of global issues and understandings of cross-national interrelatedness (Robertson, 1992). These understandings impact individual identities, cultures, values, and norms (Mansilla & Gardner, 2007). In its current form, globalization is typically detrimental to local community values that do not easily mesh with free-market/free-trade capitalist ideology and functioning. Yet, adaptive and innovative forms of resistance to the impacts of globalization are continually appearing. For example, Ziegler-Otero (2004) describes the work of indigenous Ecuadorians organizing against exploitation by multinational companies. In the USA, Sirriani and Friedland (2001) draw on a number of local, state, and national examples of civic renewal and collective action. Bold collective actions like these reflect strongly held community values that prioritize local culture and economy. These forms of resistance, however, must confront increasingly powerful multinational forces.

Power is the capacity to fulfill or obstruct the needs of individuals or the collective (Prilleltensky, 2008). In order for individuals or groups to act on their community values, they must believe they have the power to do so. Empowerment has been studied as the mechanism by which individuals, organizations, and communities gain control over their affairs and address oppressive structures in institutional or social settings (Zimmerman, 2000). Furthermore, individuals' well-being is integrally linked to the equitable and just management of collective resources in domains such as health, welfare, and environmental protection (Prilleltensky, 2008). Systems change – defined as processes designed to alter the status quo by realigning community systems – is a likely framework through which to address a destructive imbalance of power in communities (Peirson, Boydell, Ferguson, & Ferris, 2011). Yet, power also operates at the level of ideology, meaning that as social structures become more complex, systems thinking must also become more complex and adaptive to achieve desirable systems change (Christens, Hanlin, & Speer, 2007). Revisions in ideology about social structures and power differentials would likely be reflected in community values and the actions they motivate, but local collective action can also influence shifts in ideology. For example, Freedman and Bess (2011) describe a local coalition's work on the issue of food security and the role of this work in changing not only local policy and practice but community values around the issue of global climate change.

Summary

Community values can be conceptualized at the individual level as personal values that prioritize connections and commitments to one's community and at the community level, reflecting the shared values and norms among a community's citizenry. When rooted in an ethic of belonging, reciprocity, and responsibility, an individual's *and* a community's values are more likely to motivate benevolent, just, and equitable actions. Quality of life can be enhanced by community values, as these values fulfill basic personal and social psychological needs and also inspire empowered collective actions that improve the lives of others. Community values are challenged by globalization led by ubiquitous multinational entities and by complex power structures that threaten resources and equity in communities. However, community members, researchers, and policy makers have a collective responsibility to act on equitable community values to empower the oppressed and build solidarity in communities.

Cross-References

- Action Research
- Active Citizenship
- Altruism
- Civic Engagement
- Community Cohesion
- Cultural Values
- Education
- Intrinsic and Extrinsic Values
- Intrinsic Motivation
- Measures of Social Cohesion
- Neighborhood Change
- Neighborhood Participation
- Norms
- Organizational Values
- Participation in Community Organizing
- Personal Well-being
- Political Activities
- Political Empowerment
- Political Participation
- Sense of Community
- Social Change
- Social Support
- Value Theories

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Community Well-Being

▶ Neighborhood Well-Being

Community Well-being Index

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Synonyms

CWI

Definition

The Community Well-being Index (CWI) is a multi-item, self-reported measure of satisfaction with the local place of residence taking into account the attachment to it, the social and physical environment, and the available services and facilities.

Description

Background

The Community Well-being Index was developed following the structure of the ▶ Personal Well-being Index and the National Well-being Index (PWI and NWI, respectively), part of the ▶ International Well-being Index (Cummins, Eckersley, Pallant, Van Vugt, & Misajon, 2003; International Well-being Group, 2006; Lau, Cummins, & McPherson, 2005). It represents an intermediate level between these two indices. Instead of focusing on satisfaction with personal aspects or with the situation of the country, it is a ▶ subjective well-being measure of ▶ community satisfaction.

Development of the CWI

Item pool was generated by expert consensus, based on literature review and empirical studies and following the model of the PWI and NWI. It was validated in a representative sample of 1,106 community-dwelling older adults residing in Spain (Forjaz et al., 2011). ▶ Rasch analysis (Rasch, 1980) and classic psychometric methods (Scientific Advisory Committee of the Medical Outcomes Trust, 2002) were followed in the validation study.

Scale Structure

The mode of administration of the CWI, as it was developed, was as an interview. However, there is the possibility of administrating it as a self-completion questionnaire. The CWI is formed by three subscales: Community Services, with four items; Community Attachment, with three items; and Physical and Social Environment, with three items (Table 1). Respondents rate the items in a 0–10 ▶ Likert-type scale, in which 0 represents "completely dissatisfied," 5 is the neutral point, and 10 indicates "completely satisfied." To calculate the subscale scores, first rescore the items (Table 1), then sum the respective rescored items for each subscale, and finally convert the obtained values into a 0–100 linear scale, following a linear measure conversion table derived from ▶ Rasch analysis (Forjaz et al., 2011). Higher values indicate higher community well-being.

Psychometric Characteristics

The reliability of the subscales ranged between 0.83 and 0.85, as measured by the person separation index which is interpreted similarly to the ▶ Cronbach's alpha. Each subscale was unidimensional. The CWI does not allow calculating a single community well-being total score. Items were locally independent and free from gender bias. The CWI showed a good internal validity. It also displayed adequate external construct validity with moderate correlation with NWI and low correlation with health status and social support. Finally, it showed a good ability to differentiate groups by level of residential satisfaction (known-groups validity).

Community Well-being Index, Table 1 Community Well-being Index subscales, item short definition, and codification scheme for item rescoring

		Response scale										
CWI Services	Items	0	1	2	3	4	5	6	7	8	9	10
Community Services	6. Support to families	0	1	1	2	3	4	5	6	7	8	9
	5. Social Services	0	1	1	2	3	4	5	6	7	8	9
	8. Leisure	0	1	2	3	4	5	6	7	8	9	10
	4. Health Services	0	1	2	3	4	5	6	7	8	9	10
Community Attachment	10. Security	0	1	1	1	2	3	4	5	6	7	8
	9. Belonging	0	1	1	1	2	3	4	5	6	7	8
	7. Trust in people	0	1	1	1	2	3	4	5	6	7	8
Physical and Social Environment	3. Social conditions	0	1	1	2	3	4	5	6	7	8	9
	1. Economic situation	0	1	1	2	3	4	5	6	7	8	9
	2. Environment	0	1	1	1	2	3	4	5	6	6	7

Note: Item numbers indicate the order in which they are presented to the respondent

Strengths and Weaknesses

The CWI presents the following strengths: it was developed with ▶ Rasch analysis and classical test theory methods; it provides results in a linear measure, allowing the use of parametric tests and calculation of change scores; it is a short scale and easy to apply; it is a comprehensive, multidimensional measure of community well-being; it complements the PWI and NWI at an intermediate level; and it was successfully applied to assess the community well-being of older adults.

The CWI also presents the following weaknesses: there is a need for further studies in different age groups; it was developed in only one country, thus cross-national comparisons are suggested; and several psychometric attributes have not been explored yet, including, among others, test-retest and inter-rater reliability, content validity, precision, and responsiveness.

Cross-References

- ▶ Community QOL Measures
- ▶ Community Satisfaction
- ▶ International Well-being Index
- ▶ Personal Well-being Index
- ▶ Rasch Analysis
- ▶ Subjective Indicators of Well-being
- ▶ Subjective Well-being

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Community-Based Care

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Synonyms

Care by community; Care in community; Community care

Definition

Community-based care, also called community care, is social policy aimed at providing ▶ social support and services to enable people with particular needs, such as those with ▶ intellectual disabilities or mental illness and the elderly, to live independently and to participate in social life. Community-based care is seen as an alternative to care in long-stay institutions or residential establishments. Advocates of community-based care suggest that users of community care have better opportunities to enhance their ▶ quality of life than those of institutional care.

Description

In western industrialized societies, industrialization and urbanization have resulted in the need for a social system of sheltering people who

cannot support themselves, including people with ▶ intellectual disabilities or mental illness, elderly people, and even poor people, in segregated institutions such as asylums, infirmaries, workhouses, or almshouses. These institutions expanded rapidly during the period between the 1880 s and 1950s. People who needed care were admitted to infirmaries or workhouses and excluded from mainstream society (World Health Organization [WHO], 2003; Yip, 1996). However, the facilities and living environments of these institutions were often poorly maintained, and they could not provide a good quality of care. Residents might suffer ▶ malnutrition, live in smelly or grimy spaces, and even be abused. In addition, most asylums and institutions were located in the remote countryside. As a result, residents of such institutions were often isolated and excluded from society and were thus deprived of their opportunities to participate in social life. Such ▶ social exclusion would strengthen the stigma attached to the residents. Aside from the poor quality of care and social exclusion, residents treated in asylums might also have to follow daily routines and take on roles enforced by the institution and thus lose their sense of self (Goffman, 1968).

The deplorable conditions and problems of these institutions caught the attention of the public in the 1950s and 1960s and accelerated the deinstitutionalization movement. In response to social concerns about the quality of care in these institutions, Nordic countries proposed the "normalization principle," which requires the state "to integrate people with disabilities into the wider society and to ensure they adopt conventional social roles" (Smith & Brown, 1992). The UK government, similarly, passed the 1959 Mental Health Act and started to investigate the care and treatment provided in state-run hospitals. In the USA, the President's Panel on Mental Retardation, appointed by President Kennedy in 1961, recommended the normalization principle as a guide to future mental health services and enacted a series of laws requiring all 50 states to develop improved residential, community, and preventive services for people with intellectual disabilities (Braddock & Parish, 2001).

In addition to concern over the quality of care, community care was also seen as a solution to the expanding public expenditure on healthcare. The UK, for example, established its National Health Services (NHS) in 1948 to provide "free at the point of delivery" services to its citizens. However, according to Thane (2009), half of all NHS beds were occupied by people who were mentally ill or had disabilities by 1953. This quickly became a heavy economic burden on the UK government. To shift the burden, the UK government passed the 1959 Mental Health Act to enable people with mental illness "to live, as far as possible, in the community." Later, the UK government delegated management responsibilities to local authorities and incorporated private, independent, and informal sectors to provide community care services.

Advocates of community care are optimistic about what community care can bring about. However, many have reservations and offer different perspectives on the practical concerns of community care. The most prominent of those concerns are summarized below.

Firstly, is community care alone a better alternative to institutional or hospital care? According to WHO (2003), no persuasive arguments or data have shown that community services alone provide satisfying care. Nor is there evidence supporting a hospital-only approach. Thus, WHO (2003) recommends a *balanced care* approach. That is, care should be essentially community based, while hospitals play an important backup role. Coordination of the services provided in both settings is crucial to the success of balanced care.

Secondly, is community care more cost-efficient than institutional care? Hardey (1998) suggests that experience gained in Britain provides no concluding evidence that community care is a cost-efficient alternative to institutional care. WHO (2003) also concludes that "community-based models of care have been shown to be largely equivalent in cost to the services they replace [in institutional care], so they cannot be

considered primarily cost-saving or cost-containing measures."

Thirdly, several complaints have been lodged against community care systems. Mandelstam (2010), for example, argues that the current community care system in the UK has adopted stricter "eligibility" rules when deciding who is qualified for the services and now excludes many people who need care service.

In addition, the quality of such services is further jeopardized by the insufficient resources that each local or central authority has. In the UK, the stagnant economy puts pressure on both the central government and local authorities, which has forced them to keep down costs. To minimize expenditures, some local authorities in the UK have adopted "reverse bids" through internet auctions to see which provider can deliver the cheapest care for elderly people. Such down-cost strategy has led to curtailed services and low care quality (British Broadcasting Corporation [BBC], 2009).

Without sufficient resources, personnel, and respite services, *care in community* simply becomes c*are by community*. *Care in community* means formal care in the form of residential homes, hostels, outpatient clinics, small or day hospitals, community mental health centers, and outreach help. *Care by community* means care provided by families, relatives, friends, or neighbors. For *care in community* to be successful, public expenditure and trained personnel are necessary. Without these two resources, the burden of care will mostly fall on the shoulders of family members. In this way, *care in community* collapses into *care by community*. Such collapse makes the quality of the care depend highly on whether one is born into a supportive family or into an area with wealthy and supportive local authorities (Yip, 1996). Additionally, in societies where women still play the main caring role, imposing more care burden on women will also exacerbate the society's existing gender division.

Finally, community-based care might not be the preferred options for all users. Some former institutional patients may prefer staying in institutional settings because they have become used to the regulation and daily routines there. In addition, community care may change the relationship between the carer and the caree in ways that are not an issue in an institutional setting. For example, the caring experience can change how carers perceive their carees' bodies. A carer looking after a spouse may no longer see the body of his or her partner as a source of sexual attraction, instead seeing only something that needs to be cared for, especially after he or she has taken up the caring task for a long period of time (Barry & Yuill, 2008).

Cross-References

- ▶ Disability and Health
- ▶ Empowerment

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Community-Based Collaborative Action Research

▶ Action Research

Community-Based Empowerment Planning

▶ Community-Based Planning

Community-Based Participatory Research

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Synonyms

Action research; Citizen action groups; Collaborative research; Community-centered research; Emancipatory research; Inclusive research; Participatory action research; User research

Definition

Community-based participatory research (CBPR) is a research approach where individuals or groups are involved in research in their own community in a partnership with researchers (Israel, Schultz, Parker, & Becker, 1998; Katsui & Koistinen, 2008; Winter & Munn-Giddings, 2001). CBPR approach aims to ▶ equality, ▶ empowerment, and ▶ social change (Hall, 2005; Israel et al., 2010; Katsui & Koistinen). Thus, its goal is to improve ▶ quality of life of individuals and communities.

Description

Community-based participatory research has its origins in participatory research, particularly in ▶ participatory action research (Hall, 2005). According to Hall (2005, p. 5) CBPR was "first articulated in Tanzania in the early 1970s to described variety of community-based approaches to the creation of knowledge." This approach started to develop from the early 1970s in different parts of the world, especially in nongovernmental organizations and social movement interventions (p. 5). Some background and influence of CBPR approaches and theories are, for example, based on Paolo Freire's work with the oppressed and Marja-Liisa Swantz's participant research with women and local people, and many other scholars' research in different continents based on ideas that people in their own communities produce and create knowledge (pp. 7–10). The need for participatory research arose as a critique to positivist research paradigms (Caine, Salomons, & Simmons, 2007; Hall).

Participatory research has similarities with ▶ action research, emancipator research, inclusive research, and service user research (Katsui & Koistinen, 2008; Winter & Munn-Giddings, 2001). Traditionally research has been conducted by academic researchers on different groups, such as women, ▶ ethnic minorities, and people with disabilities (Winter & Munn-Giddings). Consequently, theories were made by researchers about how to research people, who were in some way "marginalized" and in danger to be socially excluded. During 1980s and 1990s movements of service users and carers' groups were established in fields of mental health, learning disability, and physical disability. It was emphasized that their perspective should be taken in consideration when developing and formulating research, policy, and practice (Winter & Munn-Giddings). Participatory research and service user research question conventional hierarchies of expertise by offering and recognizing alternative forms of knowledge. For example, service users need to address some issues about their treatment and services (Winter & Munn-Giddings). Community-based participatory research can be seen as

a partnership approach focusing on capacity building, policy change, and advocacy, for example, eliminating health disparities (Israel et al., 2010).

Community-based participatory research is used at least in disciplines of public health, medicine, nursing, social work, community work, community development, and community-based planning. Research participants, academic researchers, practitioners, professionals, residents, and service users are involved in different stages of research (Caine et al., 2007; Israel et al., 2010; Katsui and Koistinen, 2008; Nicolaidis et al., 2010). Different partners and participants have active roles in developing and formulating policy and practice (Winter & Munn-Giddings, 2001). Furthermore, community members, practitioners, and academic researchers should have an equal position to contribute their knowledge, responsibilities, ownership, and control (Katsui & Koistinen; Lawrence, 2001).

The ideal participatory research design involves research participants who participate in all stages of research process. These are planning and implementing research, making research questions, collecting data, analyzing, and interpreting data. Research participants are also involved in writing research reports and disseminating them. In most of research settings, research participants are involved in some parts of the research process (Israel et al., 1998; Katsui & Koistinen, 2008).

Participatory research approach has been criticized for lacking theory, not involving local participants, lacking participant perspective, and that academic researchers being too involved with participants (Kemmis & McTaggert, 2000). Other problems addressed are that people who already are active in politics or in civic action participate, leaving out people who have been "marginalized" from the mainstream society and having no voice (Kemmis & McTaggert). Moreover, the control and power of research design, analysis, and outcomes are not always equally distributed among all research participants (Caine et al., 2007; Wallerstein & Duran, 2010).

In a large review article on public health, Israel et al. (1998) listed several reasons why CBPR approach may end up in problems. They also gave number of suggestions how to solve these challenges. Authors categorized three main challenges: (1) issues related to developing community research partnerships, (2) methodological issues, and (3) broader social, political, economic, institutional, and cultural issues (p. 182). Firstly, challenges in partnership relations may be caused by lack of trust and respect; there can be unequal distribution of power and control or conflicts over funding. Secondly, CBPR is questioned because of its validity, reliability, and objectivity. Also, there is a demand to balance research and action to satisfy all research partners. Thirdly, there are various expectations and conflicting demands from communities, governmental institutions, nongovernmental organizations, funders, and academia (universities). There is a need for further training of research participants, institutions (governmental, nonprofit, academia), and research funders to understand the ideology of CBPR in integrating different type of knowledge to develop communities and make social changes (p. 194).

Cross-References

- Action Research
- Community
- Community-based Planning
- Community Development
- Community Participation
- Disability
- Empowerment
- Equality
- Ethnic Minorities
- Marginalized Communities
- Social Change
- Social Exclusion

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Community-Based Planning

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Synonyms

Advocacy planning; Citizen participation; Citizen participation and bottom-up planning; Community development; Community-based empowerment planning; Equity planning; Insurgent planning; Neighborhood planning; Subarea/district planning; Transformational planning

Description

Community-Based Planning for Community Revitalization

The environmental, economic, and social problems caused by the process of rapid industrialization and urbanization in the nineteenth century produced a number of powerful social movements that sought to improve the quality of urban life within poor and working-class neighborhoods. Activists within the public health, tenement housing, university settlement, government reform, public parks, labor rights, and women's movements of the late nineteenth century worked hard to secure basic human rights for those living in the overcrowded tenement districts of Europe and the United States. Their efforts to improve the lives of those forced to endure oppressive working conditions, poor housing, threatening urban environments, and inadequate municipal services in communities where competition among groups for jobs, shelter, and services was intense ultimately led to the establishment of the modern town planning profession in the first decade of the twentieth century.

One of the distinguishing characteristics of the city planning profession has been its commitment to advancing social justice in the city. The profession's effort to improve living conditions for the urban poor has, over time, manifested itself in two distinct forms of community-based planning practice. Those influenced by the "conservative surgery" ideas of Patrick Geddes have worked with those living in economically challenged communities to undertake increasingly ambitious resident-led revitalization plans building upon local assets. Those inspired by the work of Ebenezer Howard and Clarence Stein pursued the development of new towns designed to offer individuals and families, regardless of their economic status, access to living wage jobs, quality housing options, efficient public transit, as well as beautifully designed parks and public spaces.

One of the historic tensions within these two forms of community-based planning has been the degree to which poor and working-class residents of historic urban neighborhoods and new town

communities have been involved in the planning and development decisions affecting their lives. In the mid-1960s, powerful social movements emerged throughout Europe and the United States in opposition to the "top-down" revitalization efforts of municipal, provincial, and national governments that tended to emphasize large-scale clearance of low-income districts over more preservation-inspired strategies. Angered by the displacement and gentrification caused by many of these publicly funded efforts, poor, working-class, and middle-income residents of the city, supported by a small group of advocacy planners and designers, demanded greater citizen participation in and community control over the key planning and development decisions affecting their communities.

Over time, many of the grassroots groups that organized to oppose the urban revitalization plans of local and state governments transformed themselves into community development corporations (CDCs). These organizations have emerged as the primary vehicle for community renewal in low-income communities within the United States. Currently, there are more than 3,500 CDCs engaged in a wide range of business development, job generation, workforce training, affordable housing, crime prevention, and youth development activities in economically distressed areas of the USA. The leading institutional sponsors of America's ever-growing CDC network are local religious congregations that have recently come together to form one of the nation's fastest growing community development organization – the National Christian Community Development Association.

The community-based planning efforts of these grassroots organizations are being supported by a growing number of municipal planning agencies that provide data, technical assistance, and operational and programmatic funding for these groups. Recent changes in the US tax code enable individuals and corporations to reduce their federal taxes by investing in local economic and community development projects through the Low-Income Housing Tax Credit Program, New Markets Tax Incentives Program, and Historic Preservation Tax Incentive Program. In recent years, a number of national financial planning and technical assistance organizations known as "intermediaries" have been established to facilitate local access to socially responsible investor funds maintained by the nation's largest financial services companies.

Cross-References

▶ Community Participation

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Community-Based Support

► Community Adaptation

Community-Centered Research

► Community-Based Participatory Research

Community-University Partnership(s)

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Synonyms

Engaged scholarship; Public scholarship; Service-learning; "Town-Gown" relations; University-community engagement/civic engagement; University-community partnerships

Definition

Community-university partnerships are collaborations between institutions of higher education and the communities in which they function or with whom they relate on a local, regional, or global level. Such partnerships have the goal of being mutually beneficial and often focus on the sharing of resources and knowledge white addressing public challenges.

Description

Early Roots

While colleges and universities have always served the function of "elevating" graduates by instilling in them the knowledge, skills, and values that enable them to succeed in society, this private interest has been balanced historically by a focus on higher education's role in preparing citizens who will contribute to the betterment of society. John Henry Newman, in 1873, argued that students should "pursue excellence yet remain loyal to higher religious pursuits of serving society" (as cited by Maurrasse, 2001, p. 14). In many ways, it is this ideal that is institutionalized through community-university partnerships, which "demonstrate a conscious commitment to extending higher educational resources outside of the institution" (ibid). Community-university partnerships also build on John Dewey's notion that education should not serve merely to prepare graduates for life after school, but to engage them in solving real-world societal problems through, and connected with, their education (1916; 1938).

Community-university partnerships were formalized through two important acts of congress in the late nineteenth century. First, the Morrill Act of 1862 provided a set amount of land to each state with the condition that, within 5 years, the state create at least one college; the progress made in those colleges would be reported back to the state and to the Secretary of the Interior. Thus was born the "Land Grant College" that lives on today in the form of state universities across the USA; early land grants focused on practical education, especially in agricultural and technical fields, that was accessible to and met the needs of the local community, especially rural communities. In 1887, the Hatch Act extended the role of land grant universities to include agricultural extension stations. Extension programs were designed to meet the "need for research as a basis for developing agriculture" (National Association of State Universities and Land Grant Colleges, 2008). Since these early developments, a number of legislative acts have extended and modernized the role of land-grant

and extension programs, including extending land-grant status to historically black universities, tribal colleges, and universities in newly established states (such as Hawaii).

Recent Historical Developments

In the last 25 years, community-university partnerships have expanded to include a variety of programs and initiatives that move beyond agriculturally-focused efforts. Government involvement in these programs has included the creation of the Corporation for National and Community Service in 1993 (that offers educational benefits in exchange for volunteer service and supports the integration of civic engagement programs into K-12 and higher education) and the founding of the Office of University Partnerships (OUP) in the US Department of Housing and Urban Development in 1994 (which launched the "Community Outreach Partnership Centers" (COPC) Program (http://www.oup.org/)).

Beyond governmental actions, other organizations and foundations have played a key role in the evolution of community-university partnerships. Campus Compact, founded in 1985, is "a national coalition of more than 1,100 college and university presidents-representing some six million students-who are committed to fulfilling the civic purposes of higher education" (www.compact.org). This organization supports a spectrum of engaged activities that connect college learning and research to the public good. Thirty-five state-based Campus Compact offices work with institutions within their state to support these activities. In 1999, the Kellogg Commission on the Future of State and Land-Grant Universities published a report entitled "Returning to our Roots: The Engaged Institution." By engagement, they referred to "institutions that have redesigned their teaching, research, and service functions to become even more sympathetically and productively involved with their communities, however community may be defined" (p. 9). This report defined partnerships as "two-way streets defined by mutual respect among the partners for what each brings to the table" (ibid). In 2006, the Carnegie Foundation, which had historically categorized universities by size and degree granting status, created an elective classification in community engagement, thereby instituting a national standard for what qualifies as engagement through outreach (linked to traditional service and extension activities) and academic engagement (through such activities as service-learning and community-based research).

Key Concepts/Activities

Community-university partnerships can encompass a variety of ways in which these entities collaborate. As described in historical notes, the earliest forms of these partnerships were in *University Extension* programs and land-grant missions. As those programs have evolved, they continue to play a key role (especially in rural states) in sharing and applying knowledge. More recent practices, however, have expanded partnerships to touch on almost every aspect of educational and community development. Some of those practices include:

- *Civic engagement/volunteerism*: Organized campus programs through which students engage in the local community and beyond to meet expressed community needs, often with a focus on developing future leaders and future citizens.
- S*ervice-learning*: "A form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development. Reflection and reciprocity are key concepts of service-learning" (Jacoby, 1996).
- *Community-based research*: A partnership of students, faculty, and community members who collaboratively engage in research with the purpose of solving a pressing community problem or effecting social change (Strand, Cutforth, Stoeker, Marullo, & Donahue, 2003).
- *The "science shop" model*: Science shops are "small entities that carry out scientific research in a wide range of disciplines – usually free of charge and – on behalf of citizens and local civil society"

(www.scienceshops.org). This model emerged largely in Europe and has been adopted in some US-based institutions. The goal of science shops is to seek new knowledge through partnership, with researchers and community members working collaboratively.

- *Economic/community development*: Many universities partner with their local communities with an aim toward mutually beneficial community economic development, including initiatives that focus on local purchasing, effective housing, and urban development. The Community Outreach Partnership Center model and HUD's focus on Higher Education Community Development Corporations are examples of these types of partnerships (Nye & Schramm, 1999).
- *Faculty expertise and service*: Many universities maintain a database of faculty research expertise and encourage faculty members to serve on local community boards or to present in local public venues such that their research may contribute to community knowledge and development.
- *Continuing education*: With the goal of offering university courses to a wider public audience, continuing education programs offer individual courses, degree programs, and certificates to nontraditional students at both the undergraduate and postgraduate level.
- *Community-university relations programs*: Often focused on smoothing out "town-gown" relations, these programs work to address the concerns that often arise due to the presence of a university within a community. Ranging from issues related to student housing, neighbor relations, and growth, these programs can be closely related to community and economic development initiatives or focused more directly on improved quality of day-to-day life.

Other ways in which universities may relate to communities include community-based work-study, internship, and employment practices; legislative relations offices; and the sharing of university spaces with the community. Enos and Morton (2003) further categorize community-university partnerships based on duration, depth, and complexity (p. 27).

Promising Practices

Enos and Morton (2003) encourage practitioners to consider how community-university partnerships can move from being highly transactional to transformative, defined as "dynamic, joint creations in which all the people involved create knowledge, transact power, mix personal and institutional interests, and make meaning" (p. 25). Research on effectiveness of partnerships (Liederman, Furco, Zapf, & Goss, 2002; Community-Campus Partnerships for Health, 2000; Stoeker, Tyron, & Hilgendorf 2009) focuses on the following components of successful partnerships: shared mission/vision; mutual trust/respect; well-defined roles/responsibilities; balance of power among stakeholders; identification of mutual benefits; effectively shared resources; common language/understanding of terms and concepts; consistent opportunities for communication and feedback; and systems for assessment, evaluation, and accountability. The importance of developing long-term sustainable partnerships is also a key to enhancing effectiveness.

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Commute Time

▶ Time Needed to Travel to Work

Commuter Travel

▶ Commuting

Commuting

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Synonyms

Commuter travel

Definition

Commuting concerns the journey and activities that workers and students daily perform in order to go to work or to study.

Description

Research on commuting is important mainly in order to analyze transport systems and workers conditions, especially in metropolitan areas. As a matter of fact the amount of commuters has increased during the last decades due to:

- Increasing processes of ▶ suburbanization
- General improvements in transport systems
- Increasing ▶ mobility of a large amount of the population
- Difficulties in substituting physical relationships with virtual relationships through the diffusion of technological devices
- Lasting concentration of job opportunities and important functions in large urban centers combined with new patterns of residential distribution and leisure activities in the countryside.

Commuting practices are not only increasing but also transforming in connection with changes in residential patterns, labor markets, transport facilities, household structure, and technological habits. For example, many studies confirm that technology could be a complement and not a substitute for face-to-face interaction (Seetharam Sridhar & Varadharajan Sridhar, 2003).

Theoretically speaking, there are negative and positive effects linked to commuting. Commuting toward the metropolis core can generate a weakening of identity and linkages with the origin community and with respect to the family, a sense of risk in relation to criminality issues, health and psychological problems, and transport costs. Commuting is not the main cause of health diseases but contributes to worsening them (Istituto italiano di medicina sociale – European Foundation for the Improvement of Living and Working Conditions, 1986).

But commuting also can contribute to improving economic conditions, job opportunities, cultural level, and to maintaining a relationship with the social and environmental local context as well as with a large and fascinating city. Therefore, commuters' efforts are still compensated by the quality of jobs and opportunities offered by large cities.

One of the main results of these daily flows is that cities are currently characterized by the

presence of different resident and nonresident populations competing in the processes of accessing, controlling, and using local resources and services (Martinotti, 1999; Nuvolati, 2003).

Therefore, communities are no longer stable and closed entities but interact every day with different populations coming from different places.

Of course, we have to carefully distinguish between commuters and other nonresident populations using the city for other reasons than work or study. City users, tourists, and businessmen spend their time in the city with motivations like leisure, culture, amusement, meetings, and conferences. Moreover they are not as regular as the commuters in using the city.

Commuters concentrate in the core (incoming) generating a large set of problems like traffic congestion, pollution, and services overloading. However, also the number of commuters from the core (outgoing) is increasing. As a consequence, the relationships between commuting and quality of life can be studied looking to two different perspectives: the quality of life in the city due to the presence of commuters and the quality of life of the commuters.

Moreover, many studies focused on the relationship between immigrant commuting and residential segregation (Preston, McLafferty, & Liu, 1998), between commuting and gender (Blumen, 1994, 2000; Madden & Chen Liu, 1990; Tkocz & Kristensen, 1994), and between commuting and life style (Camstra, 1996; Manning, 1978), revealing how commuting practices can contribute to alter socioeconomic disparities and public transport policies (Shields & Shideler, 2003). Commuting is not an isolated system but has to be analyzed and planned also in connection with social and environmental aspects, taking into account that "sustainable commuting" is not a contradiction in terms (Banister & Gallent, 2004).

There are methodological problems regarding the availability of data. Data about the number of commuters are usually collected through the census. More updated information is often missing. In general it is very difficult to calculate the real number of commuters due to the different means they use for traveling, private, and public. Nevertheless, because of the growing number of commuters, research on their quality of life in the place of origin, during daily travel and the place of destination, becomes more and more important, as well as study about the organization and the socioeconomic development of the core and the suburban areas.

Cross-References

- ▶ Migration, an Overview
- ▶ Mobility
- ▶ Suburbanization
- ▶ Traffic Mobility
- ▶ Transport
- ▶ Work Time

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Comorbidity

► Duke Severity of Illness Checklist

Companionate Love

► Love

Comparable Worth

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Synonyms

Equal pay for equal value; Pay equity

Definition

Comparable worth means to provide the same pay for jobs which have equal requirements, namely, the knowledge, efforts, and skills needed to perform the work, and the level of responsibility and working conditions involved. All these requirements together represent the comparable value of the job, and jobs with comparable value should be awarded with comparable compensation.

Description

Cross-national research demonstrates that working women's average earnings are lower than those of men (Chang & England, 2011; Weichselbaumer & Winter-Ebmer, 2005). Women-predominant jobs are on average paid less than those dominated by men, even controlling for individual education and working experiences, job characteristics, and organizational and industrial differences (England, 1992; England, Thompson, & Aman, 2001). Caring work, done mostly by women, was particularly penalized. Many explanations are used to account for the gender wage gap.

Researchers propose several mechanisms creating the persistent wage gap between male and female workers (Petersen & Morgan, 1995). The first one is direct pay discrimination against women. Another term for this mechanism is unequal pay for equal work. It is an issue of pay inequality, as women are paid lower than men for performing the same jobs and demonstrating equivalent productivity. The second one is the allocative mechanism, which means segregation of jobs, occupations, or industries by gender. Women are more likely to be allocated to jobs or sectors paying poor wages, which explains on average the lower earnings for women than men. The third one is called the valuative mechanism. It means that jobs where women are predominant are paid lower than those held by men, even though skill or other requirements to perform the jobs well are comparable. Another term for the unequal pay for equal value is comparable worth or ► pay equity.

As a concept, comparable worth means that job titles with comparable value should have comparable pay. Differing from the concept of equal pay for equal work, the emphasis of comparable worth is on the comparability of requirements of performing the jobs. It is a more active approach to reduce the gender gap of wages and represents an attempt to pursue pay equity among workers.

Comparable worth is important for reducing the gender wage gap for several reasons. First of all, earnings of women-predominant jobs

tend to be undervalued. However, the poor compensation received by women or men in those jobs is not commensurate with the skills or abilities that they contribute to their jobs. It is a form of unjust sex discrimination. Secondly, female-predominant jobs are paid less and are often viewed as lacking in prestige, unworthy, or even of low value. As most women can only find jobs in female-predominant jobs, most of them received lower earnings than those of men. Lower labor market returns make women workers vulnerable in the labor markets and in their households. Thirdly, because of lower earnings, many lower white-collar or unskilled blue-collar women workers have to take public subsidy from the government to support themselves, children, or other family members. The social costs occur due to the reluctance of businesses to pay their female workers their worth, and the taxpayers have to pick up the check instead (Andre & Velasquez, 2010).

Comparable worth was adopted as an international principle to promote equal remuneration for men and women employees for work of equal value in 1951 (International Labour Organization, 2006). Many countries or major unions showed interest in reducing the gender wage gap and in adopting job evaluation to increase wages for the undervalued jobs. However, most of those remain an intention only and were not actually put into practice. The major concern is the sharp increase of production cost for private business or an increase of budget for the government.

To put the concept of comparable worth into practice, the first step would be to do job evaluation studies. In principle, being an objective, gender-neutral evaluation system, job evaluation "...assigns points to job characteristics based on standard personnel practices. These points are weighted by the importance assigned each factor by the firm, and a score is assigned to each job that reflects the value of that job to the employer. Wages are then assigned relative to the scores" (Thornborrow & Sheldon, 1995). With variations in some of the steps or methods taken in different evaluation systems, the results indicate acceptable reliability and validity (England, 1992, p. 223). According to some of the results, female-label jobs generally were paid less than male-label jobs with comparable worth. For instance, secretaries (women predominant) received lower pay than car-washing workers or technicians in the fire station, even though they all are employed by the same city government (Blum, 1991). Another often-cited comparison is between nurses and truck drivers. According to the job evaluation, the training, physical demands, concentration, and flexibility needed to perform the job as a nurse are comparable to those for a truck driver. But earnings for nurses on average are much lower than those paid to truck drivers.

Some countries did enact laws promoting comparable worth and carried out enforcement in the legal and administrative fields. Taking the USA, for example, there are some states or cities seriously attempting to implement comparable worth in the civil service sector, for example, Washington State, Minnesota State, and San Jose City of California. The implementation and enforcement of comparable worth raised workers' consciousness of their rights, challenged the prevailing wage hierarchy between men-predominant and women-predominant jobs, increased the earnings of some working women, and reduced the number of female working poor (Hartmann & Figart, 1999).

The issues and debates concerning comparable worth seem to be more noticed in the USA than in other countries. Some European countries, Australia, New Zealand, and Canada also had similar stipulations in acts or administrative orders to promote equal pay for jobs of equal value. The Pay Equity Act of Canada requires the public sector to adopt pay equity procedures by first identifying female- and male-predominant jobs and wage differences, determining job values and earnings disparities between comparable jobs, identifying if such disparities are justifiable, and if not, making plans to adjust the differences (Department of Human Resources and Skills Development (Canada), 2008). The requirements are even applied to the private sector enterprises hiring ten or more employees in Ontario Province of Canada.

In Australia, the Fair Work Act aims to "...provide a balanced framework for cooperative and productive workplace relations" (Fair Work Australia, 2009). One of the stipulations is to request "equal remuneration for work of equal or comparable value." The employers are asked to regularly examine their employment practices. The Employment Equity Act of New Zealand stipulates both equal employment opportunities and pay equity between women and men. Countries in the European Union also heeded the issue of pay equity and conducted job evaluation in some sectors or on some occasions. The United Kingdom and Finland appear to have been more active, and the former has applied an evaluation system to many jobs in the public sector (Soumeli & Nergaard, 2002).

As to the Eastern Asian region, Taiwan is among a few countries in the world to specifically put the concept of comparable worth into law. According to the Gender Equality in Employment Act (effective since 2002), "...Employees shall receive equal pay for equal work or equal value" (Article 10). There are no enforcement rules accompanying this stipulation. The Equal Employment Opportunity Law was implemented in Japan in 1985 and in Korea (with the same name) in 1987. Both these acts concern mostly elimination of inequality in employment opportunities and unequal pay for equal work.

Cross-References

- ▶ Gender Inequality Index
- ▶ Pay Equity

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Comparative Advantage

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Synonyms

Specialization advantage

Definition

The theory of comparative advantage explains why it is preferable (and efficient in terms of

profit but also in terms of resource allocation) between two individuals, regions, national economies, etc., to trade even if one party can produce any good or service cheaper than the other. What is of great importance is not the absolute production costs but the relative cost or the ▶ opportunity cost, that is, the cost of production of one good in terms of the cost of the other good. If each country produces goods in which the country has comparative advantage, then there will be positive effects in the global economy, as any good will be produced at a lower relative (opportunity) cost. The overall production level will increase and ▶ economic well-being will improve.

Description

Ricardo (1817 [1963]) was the first who presented a systematic interpretation of the theory of comparative advantage in 1817 in his book "The Principles of Political Economy and Taxation," using the example of England and Portugal. His theory essentially extended the theory of absolute advantage which was developed by Adam Smith in his famous work "An Inquiry into the Nature and Causes of the Wealth of Nations" published in 1776 [1937]. Absolute advantage refers to the lowest absolute cost of production of a country that specializes in a product and gives it the advantage over other countries exporting the product. Ricardo argued that specialization in production is justified even when there is no absolute advantage but only a comparative advantage. Suppose, for example, that a manufacturer produces two products, a and b, at a lower cost compared to another manufacturer. The first producer should be limited to the production of the product which has a comparative advantage over the other, which means that between the two products he will choose the one whose cost represents a lower fraction compared to the cost of the other producer. If the cost of product a for the first producer is 1/2 the cost of the second producer, while the cost of b is equal to 3/4 the cost of the second producer, then the first producer should specialize in product a, where he has a competitive advantage. Similarly, the second producer has a comparative advantage in product b.

But to understand the application of this theory in our daily lives, let us see an example of specialization, according to comparative advantage. Suppose that the governor of a bank happens to be a better typist compared to his executive secretary. According to the theory of comparative advantage, the governor should not type his correspondence, at the expense of his main job, because this would imply a high opportunity (alternative) cost. Indeed, the time available for the management of the bank is more precious compared to typing. With specialization, the banker achieves much more than a few words per minute, even if he is better than the secretary. This theory, therefore, strengthens the argument of Adam Smith that specialization and market expansion are interdependent. Generally, specialization requires the existence of a market and through this a better allocation of productive resources in the economy is achieved.

Discussion

The main criticism on the theory of comparative advantage relates to the hypotheses made (Blaug, 1978):

1. There are no transport costs (or too low).
2. The advantage of increased production has external effects, for example, in environment (pollution) or social justice.
3. There are restrictions on the movement of capital (otherwise, there would be no impetus to invest in production of wine or clothing in England, since both productions are expensive).

Despite its limitations, the theory of comparative advantage is one of the deeper truths throughout economics. Indeed, Paul Samuelson considers that it is the only theory of the social sciences which is both "true and important." Countries that ignore the comparative advantage pay a heavy price in terms of standard of living and ▶ economic growth.

Measuring Comparative Advantage

The theory of comparative advantage has attracted a lot of empirical research on trade

(Fridlay, 1987). Leontief (1953) was the pioneer in using the input–output tables to test the validity of the comparative advantage. His approach has been extended to calculate the net trade in the services of each production factor for a group of trading economies. Furthermore, an alternative measure of comparative advantage is the share of each industry in a country's ▶ GDP. If the objective is to explain observed flows of commodities, the most frequently used approach has been the gravity equation. Here the dependent variable is the bilateral trade between two countries, either aggregated or by commodity. Although the gravity model provides a good explanation of bilateral trade flows, it is not easy to infer its implications for the determinants of a country's relative trading position. Balassa's (1965) index of revealed comparative advantage (RCA) seemed to provide a cure for these shortcomings, since the normalization should allow for comparisons over time and across industries. The Balassa index is defined as the ratio of a country's share in world exports of a given industry divided by its share of overall world trade (Hardwick et al., 1990).

Cross-References

- ▶ Economic Growth
- ▶ Economic Well-Being
- ▶ GDP Growth
- ▶ Opportunity Cost

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Comparative Analysis

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Synonyms

Context of comparisons; Radical positivism

Definition

The goal of comparative analysis is to search for similarity and variance among units of analysis. Comparative research commonly involves the description and explanation of similarities and differences of *conditions* or *outcomes* among large-scale social units, usually regions, nations, societies, and cultures.

Description

In the broadest sense, it is difficult to think of any analysis in the social sciences that is not comparative. In a laboratory experiment, we compare the outcomes for the experimental and control group to ascertain the effects of some experimental stimulus. When we analyze ▶ quality of life of men and women, old and young, or rich and poor, we actually perform a comparison of individuals along certain dimensions, such as gender, age, and wealth/income. However, this meaning of comparative analysis is too general to be really useful in research. "Comparative analysis has

come to mean the description and explanation of similarities and differences (mainly differences) of *conditions* or *outcomes* among large-scale social units, usually regions, nations, societies and cultures" (Smelser, 2003).

Smelser identifies two extreme approaches towards comparative analysis: radical positivism and radical relativism. Radical positivism assumes that social phenomena are real social facts that have objective manifestations and can be measured through indices. These measures are then identified for different entities, recorded and arrayed in comparative tables. In contrast, radical relativism insists on focus on the meanings and understandings that shape the attitudes and actions of those we study and questions the possibility of empirical comparative analysis. Most social scientists have come to reject these extremes. A sensible and doable strategy in comparative analysis is to systematize the context of comparisons, both with respect to selecting comparative indices (measurements) and with respect to explaining comparative similarities and differences (Smelser, 2003). Smelser suggests that in many cases equivalence of indices is best achieved by seeking different indices for the same phenomenon in different settings. This also implies that the methodological strategy should rely on multiple kinds of data and methods: quantitative and qualitative, hard and soft, and objective and subjective.

Types of Cross-National Comparison

Among the large-scale social units, cross-national comparative research is particularly valuable for establishing the generality of findings and the validity of interpretations derived from single-nation studies. Within the large genre of cross-national research that is explicitly comparative, Kohn (1987) distinguishes four types of studies: those in which nation is object of study, those in which nation is context of study, those in which nation is unit of analysis, and those that are transnational in character. In the framework of quality of life research, the most common approach is treating the nation as context. In such research, one is primarily interested in testing the generality of findings and interpretations about how certain institutional, economic, and cultural factors and policies operate or about how certain aspects of social structure impinge on personality, individual attitudes, and individual well-being. Numerous studies have compared the outcomes in quality of life under different political, economic, and societal circumstances (e.g., Böhnke, 2008). Numerous attempts have also been made to construct indexes which could be used as measures of quality of life in comparative research. Hagerty et al. (2001), for example, evaluated no less than 22 QOL indexes on how well they measure quality of life for public policy purposes.

With the proliferation of cross-national data and the number of cases that are being compared, it becomes increasingly difficult to discern patterns and systematize findings if a large number of societies are included in the comparative analysis. One solution has been sought in grouping the countries according to various types of "regimes," such as welfare regimes, production regimes, nonprofit regimes, and gender regimes, to name a few. "Welfare regime," for example, refers to the typical ways in which welfare production is allocated between state, market, and households, as suggested in the prominent three-cluster typology of conservative, liberal, and social democratic welfare states by Esping-Andersen (1999). Such regime typologies, which cluster the countries on the basis of typical institutional configurations, became the major tool to conduct comparative analysis and generalize across the wide variations of advanced welfare states.

Comparative Methodology

There are enduring methodological problems in comparative research; key problems include the following: case selection, unit, level, and scale of analysis; construct equivalence; variable or case orientation; and issues of causality (Mills, van de Bunt, & de Bruijn, 2006).

New approaches and methods of comparative analysis have been developed in the past decades. One attempt to overcome overly abstract comparisons is "case study research" (Ragin, 1987). Ragin advocates the focus on cases or "sets" of cases and promotes a complementary logic to the tradition of multivariate statistical techniques, developing qualitative comparative analysis is one term/concept. Another methodology for the analysis of data with complex patterns of variability, with a focus on nested sources of such variability, is multilevel analysis. Comparative research on quality of life can span several levels of analysis, for example, comparing individuals in different organizations, regions, countries, or time points. Multilevel analysis allows comparing in-group cases and simultaneously taking contextual between-group variability into account (Snijders & Bosker, 2012).

Regardless of style of analysis and methods used, every comparative study must address the validity, ▶ reliability, and comparability of measures used, as well as the possibility that the selection of cases to be compared influences the results and conclusions.

Cross-References

- ▶ Contextual Indicators
- ▶ Cross-Cultural Comparison
- ▶ Cross-National Comparison(s)
- ▶ Experimental Design
- ▶ Index Construction

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Comparative Evaluation of QOL Models

▶ Systemic Quality of Life Model (SQOL)

Comparative Social Development

▶ Physical Quality of Life Index (PQLI)

Comparison Income

▶ Relative Income and Reference Group Behavior

▶ Relative Standing and Subjective Well-Being in South Africa

Comparison Over Time

▶ Inter-temporal Aspect of Well-Being

Comparison Theory

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Definition

Comparison theory focused on comparison – a cognitive evaluation about his/her ability relative to other objects – as a mechanism for enhancing or devaluating the psychological state.

Description

► Social comparison theory originated from Festinger's (1954) idea. He postulated that there exists, in the human organism, a drive to evaluate his opinions and his abilities (Hypothesis 1, p. 117). To the extent that objective, nonsocial means are not available, people evaluate their opinions and abilities by comparing, respectively, with the opinions and abilities of others (Hypothesis 2, p. 118). Such comparison orientations provide a mechanism for enhancing or devaluating the psychological state.

Comparison theory of happiness has been advocated by Brickman and Campbell (1971), Easterlin (1974), and Veenhoven (1991). In ► happiness studies, comparison theory assumes that the evaluation of life is based on a mental calculus, in which perceptions of life-as-it-is are weighted against standards of how-life-should-be (Veenhoven & Ehrhardt, 1995, p. 34). In this view, happiness is not function of absolute deprivation but relative deprivation which is depending on kinds of standards for comparison. Hence, happiness is changing, not fixed, according to the perception of possiblecomparison standards. In the course of comparison, standards of comparison play an important role as referents to influence the subjective well-being. Since standards are mental constructs which individuals develop, they differ with dispositions, life history, and environment (Veenhoven, 1989). The judgment of one's life depends on the mental inference about what life could possibly be. For example, inference from observing other people or from reflecting own experiences provides the platform to judge the present ► quality of life (QOL). In this case, because of key role of relative subjectivity in judging QOL, there is usually a gap between subjective appreciation of QOL and objective state of QOL.

According to Veenhoven and Ehrhardt (1995, pp. 34–35), there are two main variants of this theory: "social comparison" and "lifetime comparison." The social comparison variant stresses comparison with other people. It holds that people will be unhappy in spite of good conditions if they compare with others who are in an even better situation. Likewise, people would be happy in adverse conditions if they compare with others who suffer even more. The lifetime comparison variant presumes that we judge our life in the cognitive context of our best and worst experiences. This variant claims that people will be unhappy in good conditions if they happen to have enjoyed even better before. Conversely, people would be happy in adverse conditions if life was even worse before.

QOL studies have focused on the hedonic consequences of social comparison, mainly based on the simple assumption that upward comparisons generally are threatening to well-being and ► self-esteem, whereas downward comparisons are self-enhancing or reassuring (Lyubomirsky & Ross, 1997, p. 1141). Early studies in QOL focused on the symmetry dynamics of social comparison: Downward comparison increases the ► subjective well-being by boosting the self-esteem or self-enhancement (Hakmiller, 1966), whereas the upward comparison decreases it by lowering the self-evaluation (Salovey & Rodin, 1984; Tesser, Millar, & Moore, 1988). By doing experiments, Lyubomirsky and Ross (1997) demonstrated that self-rated unhappy individuals would be more sensitive to social comparison information than would happy ones.

However, recent studies suggested that such symmetry dynamics do not work well because the third contextual factors mediate or moderate the procession of comparison effects. For example, Buunk, Collins, Taylor, Van Yperen, and Dakof (1990) demonstrated that moderators such as degree of self-esteem, martial dissatisfaction, and the uncertain feeling about martial relationships intervene the comparison process. Also, Wood (1989) stressed that the social environment may not be inactive but may impose unwanted comparisons.

Cross-References

▶ Relative Deprivation Theory

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Compassion Satisfaction and Fatigue Subscales-Revision IV

▶ Emergency Workers' Quality of Life

Compassion Satisfaction Scale

▶ Emergency Workers' Quality of Life

Compassion, Happiness, and Self-Esteem

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Synonyms

Beneficence; Empathic concern; Sympathy

Definition

A deep awareness of the suffering of another coupled with the wish to relieve it. Nonjudgmental and selfless concern for another's ▶ welfare. Compassion is a discrete emotion that is attuned to harm and suffering in others and motivates ▶ prosocial behavior.

Description

> Life's most persistent and urgent question: What are you doing for others? *Martin Luther King Jr.*
> If you want others to be happy, practice compassion. If you want to be happy, practice compassion. *Dalai Lama*
> He who has mercy on the poor, happy is he. *Proverbs 14:21*

World religions often hold compassion as a sacred virtue in the alleviation of suffering and the facilitation of personal redemption. A shared value across cultures, the protection of others' well-being resonates deeply within us and may be part of our neurocircuitry (Swain et al., 2012). Eastern traditions often preach compassion as being as good for the helper as it is for the helped (e.g., Dalai Lama, 2003). Within the psychological literature, empirical studies also converge on the personal benefits of compassionate acts (e.g., Bown et al., 2009; Mongrain, Chin, & Shapira, 2010). Evolutionary theory points to the adaptive significance of kindness and compassion and its critical role for human survival and ▶ flourishing (de Waal, 2009; Keltner, 2009). Brain science has also made great strides in the identification of neural pathways and chemical reactions responsible for the beneficial effects of compassion (Goetz, Keltner, & Simon-Thomas, 2010; Swain et al., 2012). With roots in the worlds' wisdom traditions and growing support in empirical studies, the development and practice of compassion is increasingly becoming integrated within models of psychotherapy (Gilbert, 2009; Hofmann, Grossman, & Hinton, 2011) and is gaining momentum in important, interdisciplinary research circles (e.g., CCARE).

Compassion and Happiness

The notion that engaging in acts of kindness can bring about ▶ happiness has been appreciated for centuries. Recent empirical studies testing the veracity of this belief have begun to emerge and have demonstrated a link, for example, between happiness and compassionate helping. Happier people describe themselves as going beyond the call of duty at work and doing altruistic acts such as helping others more frequently (see Lyubomirsky, 2008). However, this does not address the causal relationship between feeling good and doing good. "Do compassionate actions actually improve ▶ mood? Do individuals profit emotionally when they extend themselves and behave compassionately, even at their own expense?" Experimental studies have been employed to help clarify the nature of the relationship between positive moods and acts of kindness. In one study, participants were asked to practice being accepting, supportive, and caring towards another for 5–15 min a day for 7 days. After 1 week, participants assigned to this exercise showed significant increases in happiness compared to participants in a control condition. These gains in happiness were maintained for up to 6 months (Mongrain et al., 2010), suggesting that small compassionate gestures can contribute to enduring states of happiness (also see Lyubomirsky, 2008).

Other research has examined the effect of charitable acts on levels of happiness. In an experimental study, participants were given money to spend on themselves or on others. Those who spent the money on others (e.g., donations to the homeless, treats for family members and friends) reported greater happiness than those who spent the money on themselves (Dunn, Aknin, & Norton, 2008). Longitudinal studies have also demonstrated that volunteer work can enhance life satisfaction, promote self-esteem, and reduce depressive symptoms (see Lyubomirsky, 2008). This literature provides evidence that generous gestures come with personal rewards and that people feel good when they give.

Having a sense of meaning is a critical component of happiness which may be satisfied by engaging in compassionate behaviors. Being a valuable presence and witnessing the positive changes brought into other people's existence may confer a sense of importance and purpose. Compassion strengthens bonds within a community, creates new ties, and fosters intimacy in relationships, all of which are strong correlates of happiness (Lyubomirsky, 2008). Providing assistance to and focusing on others can also be a welcomed distraction from one's own difficulties and troubles. Together with the greater

sense of interdependence created, compassionate actions can reliably improve one's ▶ emotional well-being (Keltner, 2009). This is an important consequence as positive moods engender another set of desirable outcomes including improved physical health, productivity, creativity, and even longevity (Brown et al., 2012; Lyubomirsky, 2008). Compassionate actions and the resulting boosts in mood can significantly enhance one's ▶ quality of life.

Beneficial Effects on Self-Esteem

All cultures value compassion, forgiveness, and reciprocity. Behaving compassionately is equated with morality, and a major source of self-esteem is based on "doing the right thing" (Mruk, 2006). Behaving compassionately and displaying culturally valued qualities can enhance one's self-worth. This is supported by experimental work reporting increases in self-esteem following the practice of compassionate actions (Mongrain et al., 2010). Self-esteem is also based on being accepted and valued in relationships, and behaving compassionately can increase one's chances of achieving greater social appeal (Mruk, 2006). A recent study demonstrated that reflecting on being a benefactor to others, compared to being a beneficiary, resulted in greater prosocial acts (Grant & Dutton, 2012). Helping and giving to others strengthens a positive sense of self and may be more important than receiving (Grant & Dutton, 2012). Other benefits to being kind are that others will like you, will be kind in return, and will protect you from conflict (Gilbert, 2009). The resulting positive and harmonious personal milieu can then maintain and affirm one's self-worth. We are attuned to and comprehend the nature of others' suffering, and alleviating this suffering affirms our value as a fellow human being (Keltner, 2009).

There has been a vast amount of attention on *compassion towards others* in the Western literature, while *compassion towards the self* has only recently received a surge of interest in psychological research (Barnard & Curry, 2011). According to Buddhism, compassion involves the desire to alleviate the suffering in both the self and others (Dalai Lama, 2003). The capacity for self-compassion involves being kind and nonjudgmental rather than critical towards the self. It comes with an understanding that one's difficulties are shared with the larger human condition, and brings an ability to tolerate the experience of painful feelings (Barnard & Curry, 2011). Initial empirical work provides evidence for the beneficial effects of self-compassion on overall well-being. For example, self-compassionate individuals report fewer symptoms of ▶ anxiety and depression and are less likely to "burn out." They enjoy greater ▶ life satisfaction, are better connected socially, and possess higher emotional intelligence (see Barnard & Curry, 2011). Many schools of psychotherapy now focus on the development of self-compassion as an antidote to psychological suffering (Gilbert, 2009). Mounting evidence supports the tremendous benefits of being compassionate not only towards others but also towards the self.

Compassion and Physical Health

Findings on the physiological changes associated with compassion are also beginning to emerge. Compassionate individuals who care and show greater concern for others display lower physiological responses to ▶ stress, lower stress hormones, and improved immune functioning (Cosley, McCoy, Saslow, & Epel, 2010). Compassionate feelings of devotion and ▶ trust are also related to the release of oxytocin and opioids (Gilbert, 2009; Goetz et al., 2010), hormones promoting human bonding. Preliminary evidence demonstrates a relationship between self-reports of compassion and the activation of the dopaminergic reward system (Goetz et al., 2010). These findings highlight the important biological underpinnings for the positive affective states emerging from compassionate responding. Other neuroendocrine studies have found that meditative practices towards the cultivation of compassion reduce subjective distress and improve immune response in the face of stress (Hofmann et al., 2011). Further, older individuals who provide more support to family and friends or show greater compassion towards their spouse have been found to live longer (Brown, Nesse, Vinokur, & Smith, 2003;

Brown et al., 2012). The lives of those who are compassionate are marked by greater physical health an increased resilience to adversity.

Evolutionary Roots of Compassion

Young children demonstrate an innate concern for the welfare of others and are motivated to see others helped (Hepach, Vaish, & Tomasello, 2012). Physiological data points to an inborn capacity for sympathy that is displayed at a very young age (see Hepach et al., 2012). Over a century ago, Darwin proposed that communities with the most sympathetic members would have the greatest reproductive success (see Kelner, 2009), and recent neurobiological research confirms the physiological underpinnings of compassion in its many forms (Swain et al., 2012). We come equipped with a care giving system that is deeply rooted in our evolutionary history. According to de Waal (2009), "empathy comes naturally to our species" (p. 2). We descend from a long line of highly interdependent group-living primates. Community concerns and gratuitous acts of altruism are not specific to humans but have also been observed in chimps and other species (de Waal, 2009). We have relied on our groups for survival, and our lives continue to depend on cooperative societies. Today, human beings around the world rate kindness and compassion as some of the most desirable characteristics in a potential mate, highlighting the reproductive advantages associated with these traits (Goetz et al., 2010). Our social instincts were also shaped through evolution to protect the weak and those experiencing undeserved suffering. These instincts have enhanced our chances of survival by fostering cooperative relations among nonkin. We have evolved to selectively seek out compassionate partners who devote more time and affection to offspring and who invest in cooperative, caring communities (Goetz et al., 2010).

Dispositional Factors

The extent to which an individual feels secure and comfortable in close relationships can mitigate or interfere with compassionate responding. In order to notice and act upon another's suffering, we need to feel safe and relatively free from threat. We also need to feel competent and able to cope with the demands of the interpersonal situation (Goetz et al., 2010). Attachment security (feeling secure in close relationships) has been found important in the development of compassion and altruistic behaviors (Mikulincer & Shaver, 2005). Individuals with insecure attachment styles who experience greater personal distress or disengagement in close relationships are less able to attend to and respond to others' suffering. Research has shown that enhancing attachment security or one's sense of connection and safety in relationships can promote feelings of benevolence and compassion towards others (Mikulincer & Shaver, 2005). Techniques such as compassionate mind training, empathy training (Gilbert, 2009), and loving-kindness meditation (Hofmann et al., 2011) may help individuals develop this inner sense of security and the resources necessary for compassionate responding.

Summary

Compassion is seen as an important human strength enabling individuals to connect with and care for one another. Human beings thrive on compassion and kindness (de Waal, 2009), and a converging body of literature suggests that various forms of compassionate behaviors have immediate and long-term psychological health benefits for the individuals who exhibit them. To be compassionate is to feel good about oneself while engaging in relationship-promoting activities with little risk of social censure. A biological feature of our species, compassion and kindness cultivate stronger social bonds and allow individuals to be healthier and happier. The cultivation of compassion may also change our neurocognitive functioning for the better (see Hofmann et al., 2011), emphasizing our brain's plasticity and capacity for growth in this important human function.

Cross-References

- Attachment
- Life Satisfaction Judgments
- Morality and Well-being
- Sense of Belonging

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Competence

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Synonyms

Achievement

Definition

Skills or other mental resources that lead to optimal performance in one or more life domains.

Description

Most people have a sense of what competence is and in what situations it is important. The competence-relevant situations that come immediately to mind are those commonly encountered in educational, sport, and work domains. However, competence is also relevant in less prototypic situations. For instance, striving to become more environmentally friendly,

striving to become more engaged with one's community, and learning to tie one's shoes are all examples of competence strivings. The breadth of applicability of the competence construct highlights its importance in everyday life.

Research has identified three distinct standards of competence: absolute (i.e., task inherent), intrapersonal (i.e., an individual's past attainment or maximum possible attainment), and interpersonal (i.e., normative). The type of standard an individual sets for him- or herself has important implications for performance and well-being. Both the absolute and intrapersonal standards are typically grouped together to form a "mastery" goal category, and interpersonal standards are typically referred to as "performance" goals. Beyond the mastery and performance distinction, the valence of competence strivings also has consequences for achievement outcomes. Mastery- and performance-based goals can have either an approach (positive; success) or an avoidance (negative; failure) focus. That is, people can engage in a competence-relevant task with a desire to succeed (approach) or with worries about failure (avoidance). Much of the support for this view is provided by research utilizing the hierarchical model of approach-avoidance achievement motivation (see Elliot & Dweck, 2005, for a comprehensive review of the current state of research and theory on competence).

An important contribution of the hierarchical model is its recognition that the type of competence standard (i.e., mastery or performance) can be combined with valence to reliably predict affect, cognition, and behavior. Four basic achievement goals have been identified, which together are proposed to comprehensively cover the range of competence-based strivings. Mastery-approach goals are focused on trying to increase one's competence based on an intrapersonal or absolute standard, such as striving to best one's own prior performance. Mastery-avoidance goals are focused on trying to avoid intrapersonal- or task-based incompetence, such as striving to not do worse than one's prior performance. Performance-approach goals are focused on trying to increase one's competence based on an interpersonal standard, such as striving to best another person's performance. Performance-avoidance goals are focused on trying to avoid interpersonal incompetence, such as striving to not do worse than another person.

In addition to predicting affect, cognition, and behavior, the particular goal a person adopts has been shown to influence both the manner in which people engage in competence-related activities and the outcome of those actions. Mastery-approach and performance-approach goals tend to lead to adaptive outcomes, while mastery-avoidance and performance-avoidance goals tend to lead to maladaptive outcomes. Specifically, mastery-approach goals lead to increased creativity as well as persistent interest in goal-relevant tasks, whereas performance-approach goals have been found to lead to optimal performance attainment. Conversely, performance-avoidance goals and, to a lesser degree, mastery-avoidance goals lead to poorer performance, reduced task persistence, and the selection of tasks that are easy rather than tasks that represent moderate challenge.

Antecedents of competence goal adoption have also been identified. One of the most widely studied antecedents are competence needs/motives, of which, the need for achievement and fear of failure have received the bulk of empirical scrutiny. The need for achievement is thought to reflect the positive feelings that stem from success; fear of failure is thought to reflect the negative feelings that stem from failure: Individuals who are high in fear of failure engage in tasks with worry and concern that they will experience negative outcomes. Accordingly, fear of failure has been found to lead to the adoption of mastery-avoidance and performance-avoidance goals, whereas the need for achievement leads to the adoption of mastery-approach and performance-approach goals. Interestingly, fear of failure has also been shown to predict the adoption of performance-approach goals. In this case, performance-approach goals are thought to reflect a desire to succeed in order to avoid failure (Elliot & McGregor, 2001).

Another antecedent of competence goal adoption is a person's implicit theory of

competence (Dweck, 1999). One implicit theory of competence is that it is a fixed quality that is present at birth and is unresponsive to effort and learning. The other implicit theory of competence is reflected in the belief that competence is malleable and people have the ability to increase or decrease their competence throughout life as a function of how much effort is expended. The former view has been labeled an entity theory of competence and the latter view an incremental theory of competence. The type of implicit theory of competence people have impacts the type of competence goals they set for themselves and, ultimately, their competence-relevant processes and outcomes (Cury, Elliot, Da Fonseca, & Moller, 2006). Entity views of competence have been shown to lead to the adoption of performance-based goals in general and performance-avoidance goals in particular. An entity theory signifies that one's competence is fixed, which ultimately exacerbates the aversiveness of thoughts of incompetence. If intelligence cannot be altered, then not knowing something or not being immediately proficient at a certain activity becomes a threat to the person's self, because it indicates that the individual is intellectually or physically incapable. Due to the salience of these fears, competence-relevant situations are likely to trigger performance-avoidance goals in which the person strives to not look incompetent. Conversely, incremental views of competence lead to the adoption of mastery-based goals in general and mastery-approach goals in particular. Believing that competence can be increased or decreased as a result of one's effort enables people to endorse goals and engage in behavior that facilitates understanding, rather than just performing.

The desire to attain competence, or, less optimally, the desire to not appear incompetent, has implications for affect, cognition, and behavior in a variety of domains. A proper understanding of those implications needs to account for both the standard and valence of competence-related strivings. In addition to identifying meaningful consequences related to the adoption of a particular competence-related goal, research has also found critical antecedents to competence goal adoption. These important findings notwithstanding, additional questions about competence strivings and subsequent achievement-relevant outcomes remain to be answered. For instance, research is needed to determine if the performance and well-being of individuals adopting performance-approach goals is contingent on their higher-order motives/needs. That is, will people adopting performance-approach out of a strong need for achievement experience outcomes that differ from individuals pursuing the same goal out of a strong fear of failure? Another important avenue for future research is whether the specific standard of a mastery-based goal (intrapersonal or absolute) leads to unique affective, cognitive, and behavioral outcomes. Even with these lingering questions, our understanding of the multifaceted nature of competence striving has grown dramatically in recent decades and important advances have been made in identifying critical antecedents and consequences of competence motivation.

Cross-References

▶ Need for Achievement

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Competitive Consumption

▶ Consumption Externalities

Competitiveness

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Synonyms

Global competitiveness index (GCI)

Definition

Competitiveness is the relative ability of a firm or a country, compared to other firms and countries, to sell and supply goods and services.

Description

Methodology: Global Competitiveness Index (GCI, World Economic Forum)

The Global Competitiveness Report 2011–2012, presented by the World Economic Forum, offers users a unique dataset on a broad array of competitiveness indicators for a record number of 142 economies. The Report presents the rankings of the Global Competitiveness Index (GCI) introduced in 2005. The GCI is based on 12 pillars of competitiveness, providing a comprehensive picture of the competitiveness landscape in countries around the world at different stages of ▶ economic development. The Report also contains detailed profiles highlighting competitive strengths and weaknesses for each of the 142 economies featured, as well as an extensive section of data tables displaying relative rankings for more than 100 variables.

The GCI itself comprises 113 indicators and additional variables are used, e.g., to compute countries' stages of development. In total, about 20,000 data points are collected each year for the purpose of calculating the GCI. About 12,000 data points are drawn from the Forum's Executive Opinion Survey, and the remainder is derived from external sources.

The collection of several indicators composing the macroeconomic environment pillar of the GCI, including government ▶ debt and budget balance, has proven challenging in past years because there is no one central source for these data. The International Monetary Fund (IMF) has always been the prime source for all macroeconomic data. One of the IMF's flagship publications, the *World Economic Outlook* (WEO), provides time-series data for dozens of financial and economic indicators for up to 183 economies. Although almost all countries are covered for GDP and price-related data, data coverage for savings, government debt, and budget data had until this year included only few, mainly advanced, economies. For those indicators, we therefore were required to rely on a variety of sources, including the IMF's *International Financial Statistics* and Country Reports, regional development banks' statistical publications, central banks and ministries, and the Economist Intelligence Unit, an economic research firm.

In its April 2011 edition of the WEO database, the IMF significantly expanded its country coverage for the indicators in question. It now reports budgetary, debt, and savings data for a vast majority of the 142 economies included in the GCI. In accordance with the principle of using a central source to the degree possible, it was decided to use the WEO as the main source for all macroeconomic indicators with the exception of the country credit rating measure, which is not covered by the IMF. For the many countries with data not previously obtained from the IMF, this change in source creates a break in the time series and results in variations for some countries that are larger than the year-on-year change that would have been observed had the same source been used again this year. The readers should therefore be careful when drawing comparisons between macroeconomic data in editions before 2011 and editions since April 2011, as part of the difference can be attributed to this change in source. For the newly published indicators, the WEO reports time-series data going back several years, thus allowing the evolution in a country's situation as assessed by the IMF to be tracked

Ratings

Report 2011–2012 can be found at http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf.

The Index: http://www3.weforum.org/docs/WEF_GCR_CompetitivenessIndexRanking_2011-12.pdf.

Cross-References

- ▶ Debt
- ▶ Economic Development
- ▶ Indicators, Quality of Life

References

Data-Sources, See sites
International Financial Statistics, see http://elibrary-data.imf.org/FindDataReports.aspx?d=33061&e=169393
World Economic Outlook, see http://www.imf.org/external/pubs/ft/weo/2012/02/index.htm

Complementary Alternative Medicine

- ▶ Yoga and the Quality of Life

Complementary and Alternative Medicine (CAM)

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Synonyms

Holistic medicine; Integrative medicine; Quality of life (QOL)

Definition

Medicine is what cure diseases or improve health (Jones, 1923–1931). Medicine can be biomedicine based on drugs, or complementary and alternative medicine (CAM), which consists of two major lines, herbal and diet treatments, and nondrug medicine based on interventions that change and develop the patient's consciousness, philosophy of life, and character through lifestyle, physical, emotional, psychological, sexual, social, and/or spiritual interventions.

Description

Even herbal treatments are often believed to influence the patient's consciousness and life energies more than the physical and chemical body, which is the reason for the term consciousness-based medicine. All types of CAM have as its primary intention the improvement of the patient's quality of life, so it is therefore also called quality of life as medicine (Ventegodt, Omar, & Merrick, 2010).

Mechanisms of CAM

CAM often addresses the whole person and aims for existential healing, also called salutogenesis (Antonovsky, 1985, 1987) or holistic medicine. Other types of CAM address the patient's mind and are called personal development, where the intervention is called coaching. Coaching is addressing the philosophy of life to make it more positive in contrast to education that often intents to give the person information/knowledge and train mental skills.

Many types of CAM are helping the patient to higher self-awareness and self-insight as it is generally believed that lack of understanding, repression of feelings and gestalts, and unconscious philosophy of life are contributing dominantly to the development of disease (Jones, 1923–1931). This strategy, where the examination of the patient is done together with the patient and part of the cure is often called clinical medicine or character medicine. The latter term is

used because self-insight is associated with acknowledging your own talents and stepping into physical, mental, spiritual, and sexual character as a person.

Biomedicine intents to improve health by correcting biochemical dysfunctions, while CAM intents to improve global qualities related to consciousness: quality of life, physical health, mental health, and general ability (including sexual health, social well-being, study-related and work-related functioning). The use of CAM is rapidly increasing in all Western countries, the most popular type combining talk and touch therapy as mind-body medicine (Goleman, Gurin, & Connellan, 1993; Sobel, 2000; Harrington, 2008).

CAM: Art or Science?

CAM can be art or science. Modern types of scientific CAM have been developed from the premodern cultures. From the eastern cultures come, i.e., the modern acupuncture and acupressure based on classical Chinese medicine, modern Ayurvedic medicine based on classical Indian medicine, and many advanced sexological tools for sexological healing developed from Tibetan Tantric Buddhism (Antonella, 2004; Blättner, 2004; Endler, 2004a, b; Kratky, 2004; Pass, 2004; Spranger, 2004); from Western cultures come, i.e., homeopathy, psychoanalysis and psychodynamic psychotherapy, mind-body medicine, body psychotherapy, gestalt therapy, body talk, and clinical holistic medicine(Antonella, 2004; Blättner, 2004; Endler, 2004a, b; Kratky, 2004; Pass, 2004; Spranger, 2004), which have developed from the classical Hippocratic nondrug medicine, normally acknowledge to be a science since 400 BC (Jones, 1923–1931).

The Placebo Effect in CAM

The positive impact of consciousness on health is often called the placebo effect. The most important factor contributing to the placebo effect is a close, intimate, loving, and caring relations between therapist and patient (Kaptchuk et al., 2008).

Many premodern cultures also used and still use shamanistic rituals and mind-expanding drugs in plants and mushrooms, like the Peyote and San Pedro cactus, many species of psilocybin mushrooms, and the jungle brew called Ayahuasca, to facilitate existential healing. Most researchers include shamanistic healing in CAM in spite of the use of hallucinogenic drugs because the intervention still happens directly on the patient's consciousness. The drugs have been called active placebos, and the native people normally consider them very safe in the hands of a skilled shaman, Ayahuasquero or medicine man (Anderson, 1996). Modern-type one-session healing has been practiced, i.e., as Grof's LSD therapy (Grof, 1980).

Ethics in CAM

The medical ethics came from the European holistic mind-body medicine developed in Greece around 400 BCE by the physician Hippocratic and his students. The famous Hippocratic ethics, still a central part of the medical oath in many countries, has as its first rule: Primum non nocere – Above all, do no harm (Jones, 1923–1931).

This medical tradition does not use any drugs as it considers all active substances derived from minerals, plants, and animals to be poisons (Jones, 1923–1931).

Use of CAM

CAM is still more used than drug medicine in Asia, America, and Africa, while drug medicine has been dominating in Europe for about 30 years, but the use of CAM is rapidly growing here and is expected to dominate medicine in Europe again around 2015–2020.

Types of CAM

The different subtypes of CAM and their efficacy and harm are listed in Table 1 together with biomedicine for comparison.

Complementary and Alternative Medicine (CAM), Table 1 NNT and NNH numbers of the seven CAM classes estimated from clinical studies (with chronic patients, see text) (based on Ventegodt et al., 2009; Ventegodt & Merrick, 2009)

	Short-term effect (0–6 months)	Long-term effect (6–24 months)	Side effects and adverse events
Class 0-Biomedicine	NNT = 5–50	NNT = 5–100	NNH = 1–5
Class 1-CAM (chemical CAM)	NNT ≥ 10	NNT ≥ 20	NNH = 25 (allergy)
Class 2-CAM (physical therapy)	NNT = 2–4	NNT = 6	NNH > 64,000
Class 3-CAM (psychotherapy)	NNT = 3	NNT = 6	NNH > 64,000
Class 4-CAM (spiritual therapy)	NNT = 10	NNT = 20	NNH > 64,000
Class 5-CAM (mind-body medicine)	NNT = 2	NNT = 4	NNH > 64,000
Class 6-CAM (holistic medicine)	NNT = 2	NNT = 1–2[a]	NNH > 64,000
Class 7-CAM (shamanism with drugs)	NNT = 1	NNT = 1	NNH ≥ 1,000

[a]The effect of clinical holistic medicine and similar medical systems seems to continue to increase through time (NNT: number [of patients] needed to treat [for one to reach treatment goal]. NNH: number [of patients treated] needed to harm [one patient]

Healing Principles of CAM

In Europe all scientific knowledge on CAM has been collected and integrated into a master of science program at the Interuniversity College, Castle of Seggau, Graz, Austria, where 40 academic institutions all over Europe have contributed to this project (Antonella, 2004; Blättner, 2004; Endler, 2004a, b; Kratky, 2004; Pass, 2004; Spranger, 2004). The five healing principles of CAM acknowledged in the books from this institution are the following:

- The healing should be according to the principle of salutogenesis, addressing the existential core of the patient, and not a part of him or her, whether this is the body, the mind, the spirit/soul, or the gender and sexuality. Not even the health in symbolic significance is enough. When the patient heals holistically, both past and future are healing, the whole personality heals, and the person finds his true place in the universe, to be the constructive and valuable, responsible, and participating individual he was meant to be.
- The healing should take the patient back to the time when and where the damage was done, using the principle of similarity going all the way back to Hippocrates. In the Hippocratic Corpus (Jones, 1923–1931), we find the significant sentence: "Disease is born of like things, and by the attack of like things people are healed – vomiting ends though vomiting"; this is also the fundament of homeopathy. So many things can harm the patient's wholeness, and only by integrating this, meeting it again in life or in therapy, the patient can truly heal.
- Hering's Law of Cure states that in healing the patient will show all the symptoms that he showed on his route to the disease. When he heals the problems will surface coming from its hidden places in the core of the body, the vital organs, and the head (upper body). A disease will therefore leave the organism in a specific pattern that can be seen and understood and accelerated by the physician or therapist.
- The principle of minimal use of force is also known from Hippocrates – in Latin "primum non nocere" – do no harm. Many patients prefer holistic healing methods to biomedical, as the use of force is much less in psychotherapy, bodywork, and philosophical exercises than in using drugs and surgery.
- The most important principle in holistic medicine actually initiating the holistic healing is the principle of added resources. It is the adding of resources in present time in the therapy that allows the patient to go back in time into the traumatic event that originally damaged his existence, and only in doing that can the patient integrate the event and heal his existence. The reason for the necessity of

Complementary and Alternative Medicine (CAM), Table 2 Accumulated cost for one patient cured through time (year 1, 2, 10, and 50) for biomedicine (calculated for NNT = 10) and the seven CAM classes (NNT = 1–10) based on clinical studies with chronic patients (Adams et al., 2007) (cost of biomedical examination, hospitalization, and treatment of adverse effects and events not included)

	First year Cost per patient	Second year Accumulated cost per cured patient	Year 10 Accumulated cost per cured patient	Year 50 Accumulated cost per cured patient
Accumulated cost pr. patient (€) Constantly treated w. biomedicine	2,000	4,000	20,000	100,000
Accumulated cost pr. patient Constantly treated w. CAM (€)	2,000	4,000	20,000	100,000
Class 0-Biomedicine (€)	20,000	37,000	170,000	1,000,000
Class 1-CAM (chemical CAM) (€)	>20,000	>40,000	>200,000	1,000,000
Class 2-CAM (physical therapy) (€)	4,000	6,000	24,000	100
Class 3-CAM (psychotherapy) (€)	6,000	10,000	46,000	200
Class 4-CAM (spiritual therapy) (€)	20,000	38,000	180,000	800
Class 5-CAM (mind-body medicine) (€)	4,000	6,000	16,000	100
Class 6-CAM (holistic medicine) (€)	4,000	5,000	10,000	30
Class 7-CAM (shamanism with drugs) (€)	500	600	800	2,000

going back and integrating the event is that what allows the trauma to be a trauma is the decisions the patient took in the moment of the trauma. It is this modification of the patient's consciousness and personal philosophy of life that is the real damage on the patient's existence, and when the patient "let go" of the old negative and life-denying decisions, then the existential healing occurs.

Efficacy of CAM

The efficacy of CAM varies a lot with the different type of CAM. The estimated NNT numbers (numbers needed to treat) of the CAM treatments of physical, mental, existential, and sexual health issues and working disability (mostly based on clinical studies using chronic patients as their own control) (based on Madsen et al., 2003; Smith, 2003; Ventegodt, Andersen, Kandel, & Merrick, 2009; referring to different types of mind-body medicine) are as follows:

CAM for physical health: 2–4 (subjectively poor physical health NNT = 3; coronary heart disease NNT = 1–2; cancer (QOL/survival/pain) NNT = 2/7/3; chronic pain NNT = 2–3)

CAM for mental health: 2–5 (subjectively poor mental health NNT = 2–3; schizophrenia NNT = 3–5; borderline NNT = 3; major depression NNT = 2–3; anorexia nervosa NNT = 3; anxiety NNT = 3; social phobia NNT = 3)

CAM for sexual dysfunctions: 1–6 (subjectively poor sexual functioning NNT = 2; male erectile dysfunction NNT = 2; female orgasmic dysfunction NNT = 1; female lack of desire NNT = 2; female dyspareunia NNT = 2; vaginismus NNT = 2; vulvodynia NNT = 2; infertility (close ovarian tubes) NNT = 6)

CAM for psychological and existential problems: 1–3 (subjectively poor quality of life NNT = 2; sense of coherence NNT = 2–3; suicidal prevention (with decisions) NNT = 1; low self-esteem NNT = 2)

CAM in pediatrics (all patients NNT = 1–2)

CAM for low working ability (subjectively poor working ability, objectively poor working ability) NNT = 2

These numbers must be compared to the general NNT numbers for biomedicine as estimated by the pharmaceutical industry: pharmaceutical drugs in general (according to Smith, 2003) NNT = 20.

In a modern society the price of health has become important, and many analyses find CAM more cost-effective than pharmaceutical drugs (see Table 2).

Cost-Effectiveness of CAM

The cost-effectiveness of medicine has become an important issue as the prize of biomedicine in many countries has become an enormous economic burden. In countries with socialized medicine, biomedicine is often the dominating kind of medicine for the population, where half are chronically ill (Kjøller, Juel, & Kamper-Jørgensen, 2007). In spite of free medical care and massive and continuous treatment of a huge fraction of the Danish population with drugs for over 40 years, 25 % of the population is chronically mentally ill and 40 % of the patients are chronically physically ill, with about half of the mentally ill patient also having some physical chronic disorder, typically chronic pain, presumably of psychosomatic origin.

It is a fact that the national cost of the pharmaceutical drugs has doubled every 5 years for two decades in Denmark and many other European countries with a development that seems to continue. Therefore, less expensive holistic, complementary, and alternative (CAM) treatments have become the focus of attention, as these treatments might be more cost-effective than biomedicine (Adams, Awad, Rathbone, & Thornley, 2007). It is a well-known fact that many kinds of CAM are not efficient, like acupuncture for cancer, but still the cost might be so small that even a small positive effect will make it more cost-effective than even the best surgery or chemotherapy, which is very expensive and less productive in most metastatic cancers. Unfortunately, very few studies have been performed in this field, rendering us with almost no data about the actual situation for most types of CAM for many clinical conditions.

Fortunately, a number of reviews have recently documented that some types of CAM, especially mind-body medicine, are cost-efficient compared to biomedicine (Sobel, 2000) and completely without the many serious side (adverse) effects and adverse (negative) events that often follow treatments with drugs (Ventegodt & Merrick, 2009). These reviews have encouraged the present comparative analysis of the cost-effectiveness of CAM and biomedicine.

A modern way to express cost-effectiveness is the price of a quality of life-year (QALY). When you compare the cost per QALY for a biomedical treatment with NNT = 10–50 with a CAM treatment, you will notice that there is almost no difference in cost-efficacy, if you look at the inefficient types of CAM, while there is a factor 1,000 difference if you look at the efficient CAM types.

The true financial difference between a society using pharmaceutical drugs and CAM becomes visible, when you understand that a chronically ill patient will cost money every single year of his or her life.

Future of CAM

Interestingly, the highly efficient shamanistic one-session healing practiced in most premodern cultures seems to be the cheapest solution of all. Maybe the Native Americans, the Australian Aboriginals, the African sangomas, and the Samic shamans were wiser than we believed until now. This might point to an interesting development of CAM in the future, where we will have fewer resources to help and heal. One-session healing, the possibility of being healed in one day, is now under intense scientific investigation in many research teams worldwide.

Cross-References

- ▶ Happiness
- ▶ Holistic Medicine
- ▶ Mind-Body Medicine
- ▶ Quality of Life
- ▶ Salutogenesis
- ▶ Well-Being

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Complementary Stereotyping

▶ Gender Inequality and Subjective Well-Being

Complex Data

▶ Units of Analysis

Complex Systems

▶ Faceted Action System Theory (FAST)

Complexity Paradigm

▶ Complexity Theories

Complexity Sciences

▶ Complexity Theories

Complexity Theories

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Synonyms

Complexity paradigm; Complexity sciences

Definition

The complexity paradigm, also referred to as complexity theories, is nowadays understood as being composed by different theories (chaos theories, fractal theory, theory of catastrophes, and theory of fuzzy sets) (Munné, 1995, 2004) which have in common the nonlinearity property (see the entry on ► Nonlinear Effect). The term complexity comes from the Latin word *complexus* which means totality (Dimitrov, 2002).

Complexity theories are thus based on the idea that systems have to be understood as totalities (Dimitrov & Hodge, 2002; Lucas, 2002).

Description

From a historical point of view, Emmeche (1997) states that it is possible to place the so-called complexity sciences or theories at some point in between modern and postmodern thought. An idea very often connected to that of complexity is that complex things or phenomena must necessarily be understood in the context of multiple composed systems with many internal relationships (Emmeche, 1997). However, complexity is a synonym neither for something complicated nor for something composed (Munné, 1994a).

According to Pavard and Dugdale (2002), "*a complex system is a system for which it is difficult, if not impossible to restrict its description to a limited number of parameters or characterizing variables without losing its essential global functional properties*." Because of its qualitative character, it makes no sense to talk about pieces but aspects (Munné, 2004–2005). As a result, scholars have fallen back on qualitative math (Briggs & Peat, 2001). Quantitative math (analytical) measures a system through the study of how some characteristics, such as its movement, affect the remaining aspects of the system. In contrast, qualitative math (holistic) is interested in explaining the characteristics of this movement as a totality.

This is why complexity theories reject the traditional emphasis on simplification and reduction, which are considered to be the wrong approach to natural and social phenomena. Although both simplification and reduction are very useful in the research process, they are unsuccessful in their application at the systems level. This is a consequence of the nonlinear properties of the relationships among systems and the interactions among aspects of the same system. For this reason, more and more pieces of research go in the direction of a paradigm based on complexity as an alternative of a paradigm based on simplicity, which has been the ruling tendency during many years.

One of other characteristics of complex systems is their openness to environment. Complex systems are open (dissipative) and it is not always easy to identify the border between a complex system and its surrounding environment, as it is fuzzy (Pavard & Dugdale, 2002). This is what Mainzer (1994) calls complexity's lack of a fixed limit. Complexity thus refers to the relationship between the subject and the object that he/she is trying to understand (Arecchi, 2001): specifically, to the degree of ignorance (quantity of information) the former has in relation to the latter (Biggiero, 2001).

Another feature of complexity is its interdisciplinary way of approaching "reality" (Allegrini, Giuntoli, Grigolini, & West, 2004). To put it another way, complexity crosses over borders of scientific disciplines in the study of nonlinear systems. In this sense, complexity laws are more than physical laws, despite the fact that its mathematical principles were discovered by and first applied to physics. Complexity laws explain, in the end, the emergence within complex systems of certain "macro" phenomena from the interaction of elements at a "micro" level (Mainzer, 1994).

A concept especially linked to complexity is that of self-organization, which at the same time has a lot to do with emergence. Complexity is generally understood as an emergent phenomena, and emergence is what self-organized processes generate (Corning, 2002) and is therefore a characteristic of all complex systems (Kelso, 1995; Standish, 2001). Generally speaking, complexity establishes that when the elements of a system interact under critical

circumstances, certain conditions are produced so that the components self-organize to create structures with a high evolutionary potential which show a hierarchy of emergent properties (Dimitrov & Hodge, 2002; Riofrío, 2001). To put it another way, if we take as a departure point that any emergent phenomenon implies changes in the dynamics of the system, then when these changes are characterized by their directionality, dynamic stability, and some continuity, we can say the system has self-organized (Dimitrov, 2002).

According to Pribam (1996), the attempt to achieve a common definition of complexity requires an acknowledgement of the paradox of the concept, which encompasses two levels of analysis at the same time: macro and micro levels. Ravn et al. (1995, quoted in Emmeche, 1997) talk about different meanings, among the various notions of complexity that can be attributed to this concept, when it is used in relation to the sciences in general. These are as follows:

1. *Descriptive complexity*. This refers to the need to use different methods to describe a phenomenon as fully as possible. For instance, any organism can be described on different levels (biochemical, cellular, anatomical, ecological, etc.), and for each of these levels it is necessary to obtain an exhaustive description (Ampola, 2000).
2. *Ontological complexity*. A phenomenon is ontologically complex when it is organized as a system composed of various nonidentical components which have system properties. Relationships among them lead to a higher level of knowledge which cannot be reduced to its constituent parts.
3. *The conception of complexity from the perspective of complex dynamic or adaptive systems* (complex, nonlinear, and interactive systems which have the ability to adapt to changing environments).

   This can be translated into concepts such as self-organizing systems, cooperative behavior, nonlinear dynamical systems, and emergent properties. In this case, the central concept is that of change, evolution, adaptation, and emergent behavior (Mathews, White, & Long, 1999).
4. *The concept of complexity has also stimulated very interesting work in the philosophy of science* about the role of causality, relationships among levels, and prediction in science. This work has particularly emphasized the importance of the concept of complexity for the transition from a classical paradigm, based on simplicity, to a new paradigm, based on complexity.
5. *In the social sciences there are different notions of complexity*. These are dedicated to the study of processes of differentiation and segmentation which take place within social systems to decision-making processes when the information available is not completed.

From this qualitative perspective of understanding phenomena, Munné (2004–2005) considers that there are three ways of approaching complexity: the speculative one (which is very common within philosophy of science), the empirical one (which derives from research into chaotic dynamics), and a third more integrative approach. The first perspective understands complexity as a priori, as something which can be grasped through meditation about data. The ideas of Edgar Morin (1995) are an example. For the second approach, which is characteristic of chaos theories, complexity is a posteriori concept, that is, it stems from theory which comes out of data (Munné, 2004–2005). The work of the Nobel Prize winner for chemistry, Ilya Prigogine (1986), and his concepts of far from equilibrium state in relation to self-organizing phenomena are an example of the third perspective.

Despite the existence of some discrepancies among complexity researchers, there is a common conceptual body many authors agree on (Allegrini et al., 2004; González, 2006; Riofrío, 2001). (1) *Complex systems generally have, although not necessarily, a high number of elements*. (2) *The elements or aspects of a complex system interact in a dynamical way and change through time*. (3) *The nature of the relationships among the elements of a complex system is characterized by its high degree of connectedness*: One element influences and is influenced by a high number of other elements.

(4) *These relationships are nonlinear: Small causes generate big effects and the other way round* (this is the so-called sensitivity to initial conditions). (5) *Relationships are short termed*. (6) *There exists positive and negative feedback*. (7) *A complex system has a history*: It evolves as time goes by and, so, its present state is determined by the past. (8) *It is difficult to establish borders within a complex system*: The observer's perspective influences the definition of these limits as they are frequently a consequence of his/her descriptive objectives.

According to Pavard and Dugdale (2002), some properties of complex systems are *non-determinism and non-tractability* (it is almost impossible to anticipate the behavior of a system in an accurate way, despite having knowledge of the functioning of its elements), *limited functional decomposability* (a complex system has a dynamic structure, and it is unrealistic to study its properties through the decomposition of its elements), *the distributed nature of the information and representation* (it is not possible to locate information in a specific point of the system, as it is more or less uniformly distributed throughout it), and *emergence and self-organization* (a complex system encompasses emergent properties which are not directly accessible from the understanding of its elements).

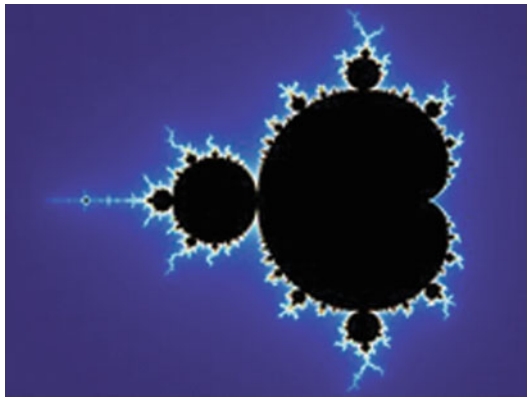
Properties that can be attributed to complex systems are multiple, those just described being only a small sample. Among them, some authors (Munné, 1993, 1994a, 1994b) prefer to adopt the following: nonlinearity, chaos, fractals, catastrophe, and fuzziness. The last four properties are, in fact, the different theories which make up complexity, at least to date. In what follows the main characteristic of these theories and some of their applications to the field of quality of life and more specifically to subjective well-being will be provided.

Chaos theories attempt to explain the fact that complex and unforeseeable results can occur in systems which are very sensitive to their initial conditions (Pavard & Dugdale, 2002) (see Fig. 1). Chaos is, in fact, the most sensitive phase within a system's processes of evolution to

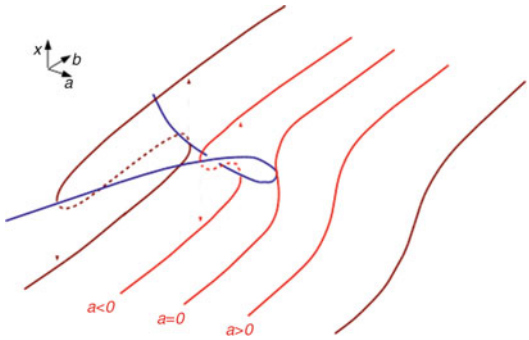
Complexity Theories, Fig. 1 An example of Lorenz attractor (Source: Wikipedia, retrieved in August 2011)

reorganization and is one of the approaches to complexity which has received most attention by researchers. From the point of view of chaos theories, understanding psychological and psychosocial phenomena as being unstable within a stable environment is not a contradiction but rather a very important source of richness for their study. Conceiving subjective well-being from the point of view of chaos theory helps to understand the fact that we can talk about a certain stability even though the levels of subjective well-being (and also its elements) vary and go through different phases during the course of the life-span.

Fractals are neither two-dimensional nor three-dimensional, as they have a fractal dimension of between 2 and 3. They show scalar invariance, that is to say, that the properties of the object or phenomenon continue to be the same despite changes in the scale of measurement. They are extraordinary complex, although they have a very simple pattern (Mandelbrot, 1987, 1997) (Fig. 2). They are the consequence of iteration processes and also display chaotic behaviors. From the perspective of social psychology, the concept of "self," for instance, can be understood both as chaotic and fractal (see Munné, 2000). The same applies to attitudes. Generational patterns within families also have a fractal dimension (Bütz, 1997). The concept of self-similarity, which is key for the study of fractals, is also applicable to subjective



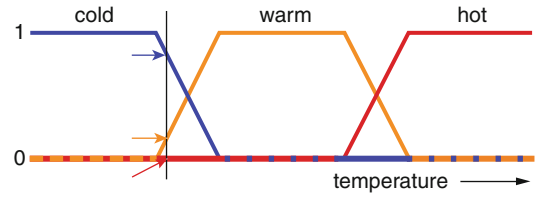
Complexity Theories, Fig. 2 Mandelbrot set (Source: Wikipedia, retrieved in August 2011)



Complexity Theories, Fig. 3 Diagram of cusp catastrophe (Source: Wikipedia, retrieved in August 2011)

well-being. Although people experience changes during their lives, the "whole" which is understood as the levels of subjective well-being and of its elements does not lose his identity.

Catastrophes refer to the nonlinear change of systems when they experience abrupt and discontinuous transformations from one state to another (Briggs & Peat, 2001; Byrne, Mazanov, & Gregson, 2001; Giorello & Morini, 1993) (see Fig. 3). Psychological catastrophic models have been applied to study, among other things, psychophysical judgements, perception of optical illusions, and chromatic vision under the effects of stress (Clair, 1998). Catastrophic models can be a very productive tool for understanding not only continuity/discontinuity processes but also the



Complexity Theories, Fig. 4 Fuzzy logic temperature (Source: Wikipedia, retrieved in August 2011)

different behavior of people in the face of similar life events. They can provide an answer to the question of why some people experience a decrease in their levels of subjective well-being, while in others it is maintained, or even increased, in reaction to the same or similar life circumstances.

Finally, fuzzy logic deals with imprecise and vague ways of reasoning, that is, the majority of ways of reasoning (for more details see Givigliano, 2000; Kosko, 1995; Trillas, Alsina, & Terricabras, 1995; Valverde, 1993) (see Fig. 4). Many key concepts for human and social sciences, such as those of cognition, emotion, intelligence, mind, group, and public opinion, are essentially fuzzy (Munné, 1995). Many if not all psychosocial phenomena, including social risk and protection factors in childhood (Casas, González, Calafat & Fornells, 2000; González, 2002), social needs and quality of life (Casas, 1996), and social networks (Casas, 2003), behave as fuzzy sets. This can be also generalized to include the instruments used to measure these phenomena, such as psychosocial indicators.

The concepts of subjective well-being, satisfaction with life as a whole, satisfaction with specific life domains, self-esteem, perceived social support, perception of control, and aspirational values all behave as fuzzy sets. For each of these constructs there is a high consensus on some traits considered basic or nuclear. However, the closer and more detailed or precise the observations made or measures taken by different agents, the lesser the consensus. The fuzziness of this field of study is also evident in the dimensions they include and the characteristics of these.

At the same time, when trying to define which dimensions make up subjective well-being and how to operationalize those dimensions, the specialized literature proposes multiple systems of indicators. In this sense, the very process of construction of the concept of subjective well-being is itself chaotic, fractal, catastrophic, and fuzzy.

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► Nonlinear Effect

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Component Analysis

▶ Simple Component Analysis

Components of Optimal Sexual Experiences

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Synonyms

Eroticism; Great sex; Optimal sexual intimacy; Pleasure, sexual

Definition

Although definitions of optimal sexual experiences are subjective, the following common components have been identified across a variety of individuals: being present, focused, and embodied; connection, alignment, merger, and being in synch; deep sexual and erotic intimacy; extraordinary communication and heightened empathy; interpersonal risk-taking, exploration, and fun; authenticity, being genuine, uninhibited, and

transparency; vulnerability and surrender; and transcendence, bliss, peace, transformation, and healing.

Description

Historically, research on ▶ sexual functioning has focused overwhelmingly on sexual dysfunctions. These are usually operationally defined as difficulties engaging in penile-vaginal intercourse (e.g., erectile dysfunction, vaginismus) and/or problems with appropriately timed orgasms (e.g., premature ejaculation, anorgasmia). Sexual functioning has been equated with physiological functioning. There has also been a lack of research on "normal" sexual experience. The implication of this gap is that normal sexual functioning represents simply the absence of sexual dysfunctions. This dichotomy is problematic in that it does not reflect the reality of many people's experiences: Many individuals who are unable to engage in intercourse or orgasm are nevertheless satisfied, whereas many who attain "perfect" physiological functioning are nevertheless dissatisfied with the quality of their sexual experiences. Clearly, a dichotomous understanding of sexual functioning is inadequate, insufficient, and/or incorrect. Some research has been conducted on ▶ sexual satisfaction, which has primarily focused on identifying correlates of the phenomenon (e.g., sexual communication, sexual self-esteem); however, no studies, either qualitative or quantitative, have been done to define the term itself.

Until recently, there have been no attempts within the academic research literature to define or describe optimal sexual experience. The topic has been ignored within academia, despite its perceived impact on the quality of life and evident interest from the general public (Rye & Meaney, 2007). Movies, television shows, music videos, romance novels, and pornography provide illustrations of what "great sex" is supposed to look like. Lifestyle magazines, self-help books, websites, and talk shows provide explicit advice on how to achieve this. Previous research has shown that media representations of "great sex" tend to focus on amazing techniques, novelty, and "outstanding" orgasms; however, these suggestions are likely to be erroneous, flawed, or incomplete (Zilbergeld, 1999). A few sex therapists have advanced theories about the definition and components of optimal sexual experience based on their clinical work. These clinicians suggest that optimal sexual experience is unlikely to be defined by physiological functioning or orgasm; each person's definition will be subjective and individualized. Instead, optimal sexual experience is hypothesized to include elements such as communication, eroticism, a focus on ▶ pleasure rather than performance, a nongenital focus, openness, lack of inhibitions, playfulness, variety, intimacy, relaxation, being present, anticipation, affection, communication, orgasm, ecstasy, and transcendence (Barbach, 2000; Broder & Goldman, 2004; Kleinplatz, 1996, 2005; Metz & McCarthy, 2007; Morin, 1995; Ogden, 2001; Schnarch, 1997). A few have developed models of optimal sexual experience. Ogden (1994) posited a model of "great sex" that would include interlocking circles representing orgasm, ecstasy, and pleasure. Whipple (1976, as cited in Broder & Goldman, 2004) suggested a circular model that included holding, penetration, manual sex, genital touching, touching, intercourse, oral sex, self-touching, kissing, and several blank spots where an individual could fill in personal preferences. However, neither these models nor clinical theories had been empirically verified.

In order to fill the gap in the literature, Kleinplatz et al. (2009a) set out to define and describe optimal sexual experience. Semi-structured interviews were conducted with 75 key informants, that is, individuals presumed to have expert knowledge in the phenomenon under investigation. Participants consisted of individuals over the age of 60 who had been partnered for 25 years or more, self-identified members of sexual minority groups, and sex therapists. Historically, the sexuality of the elderly has been pathologized in the research literature, targeted by pharmaceutical companies, and marginalized by the mainstream media. However, it was thought that older individuals who have managed to make

a relationship last for 25 years or more may possess valuable knowledge about what makes for lasting and fulfilling sexual relations. Self-identified members of sexual minority groups BDSM (i.e., bondage and discipline, dominance and submission, and masochism and sadism or master and slave) practitioners, GLBTQ (i.e., gay, lesbian, bisexual, transgender, and questioning)-identified individuals, and polyamory practitioners have also been pathologized within the research literature. Paradoxically, there may be much to learn about sexuality from those who have dared to step outside the conventional sexual script. Sex therapists were selected so as to provide a conceptual viewpoint and also because this group had presumably spent time thinking about optimal sexuality so as to help their clients develop treatment goals.

A phenomenologically oriented ▶ content analysis was conducted on the interview transcripts. Research team members read the interview transcripts, developed preliminary lists of themes, and discussed emerging ideas within the team always followed by a return to the interview data. This iterative process was repeated until consensus was achieved within the group on the components of optimal sexual experience. Subsequently, team members who had been kept "blind" to the previous analyses contributed their perceptions, thus resulting in the revision of the preliminary list of components. Eight major and two minor components emerged from the analysis.

The first major component was being focused, present, and embodied. This feeling is described as being totally immersed, absorbed, or lost in the moment. This required banishing distractions and shutting down the "running commentary" in one's head during sex. The second major component was feeling a sense of connection, alignment, merger, and being in synch with one's partner(s). This entails feelings of merger and loss of personal boundaries in the moment of an optimal experience. This feeling is characterized by language borrowed from physics such as "energetic," "electric," or "conductive." Connection is not determined by the length of the relationship between partners, which could be several hours or several decades. By contrast, deep sexual and erotic intimacy, the third major component, is predicated on a more lasting relationship characterized by deep ▶ trust, caring, consideration, and respect. It involves knowing one's partners well but continually striving to know them better. Extraordinary communication and heightened empathy was the fourth major component of optimal sexual experience. This type of communication bears few similarities to sexual communication as it is usually defined in the research literature (e.g., use of "I" statements, paraphrasing, divulging of sexual preferences). Instead, this caliber of communication requires lovers sharing themselves completely before, during, and after sexual experiences, both verbally and nonverbally. The mere act of disclosure can be pleasurable for some, while others find pleasure in their partner's sharing. This expert-level communication also involved heightened empathy in the form of heightened sensitivity to words and touch and paying very close attention. The fifth major component was exploration, interpersonal risk-taking, and fun. This kind (or these kinds) of sexual experiences constitute an ongoing discovery process, during which partners could challenge one another and expand their personal boundaries. Fun, playfulness, ▶ laughter, and a sense of ▶ humor were all deemed crucial to this process. Authenticity, transparency, and being genuine and uninhibited were the sixth major component. This requires giving themselves permission to not hold back during sexual encounters but instead to let go completely. As with communication, participants emphasized the pleasure of revealing themselves and also of welcoming the partner's authentic self. The seventh major component was vulnerability and surrender. This involved letting go *to* one's partner, surrendering to the situation itself, and being swept away. The final major component of optimal sexual experience was transcendence and transformation. The experience was described as blissful, peaceful, soulful, timeless, and ecstatic, even by participants who identified as atheists or agnostics.

Many stated that optimal sexual experience was by its very nature healing and growth enhancing. In addition, two minor components of optimal sexual experience were identified; these were mentioned by only a minority of participants and were not emphasized to the same degree as the major components. The first minor component was intense physical sensation and orgasm, that is, intense physical sensations, satisfaction, and pleasure; however, those who mentioned this element were usually quick to add that great physical sensations alone would not qualify an experience as optimal. The second minor component was lust, desire, chemistry, and attraction.

Although the long-held assumption in the literature has been that there are significant differences in sexuality between men and women, old versus young people, straight versus gay individuals, etc. (Baumeister, Catanese, & Vohs, 2001; Israel & Mohr, 2004; Okami & Shackelford, 2002), there are significant commonalities across individuals' experiences that are not dependent on age, sex, gender, ▶ sexual orientation, physical ability status, health status, or the ability to experience "proper" genital functioning and/or orgasm (Kleinplatz et al. 2009b). These findings lend empirical support to the theories of some clinicians (Broder & Goldman, 2004; Schnarch, 1997); they also parallel findings in other, nonsexual areas such as sports psychology (e.g., being present [Gallwey, 1997; Jackson & Csikszentmihalyi, 1999; Orlick, 1998]) and the peak experience literature (e.g., authenticity [Maslow, 1971]).

These findings have significant implications for theory, research, clinical practice, and members of the general public. A new understanding of sexuality itself will be required that accounts for the entire spectrum of sexual functioning, from dysfunctional to optimal. New models will need to include physiology, behavior, cognitions, and affect at the individual level and also provide interpersonal and cultural contexts for sexual experiences. Researchers on sexual functioning would be advised to develop different outcome goals and measures for treatment studies and pharmaceutical trials. Additional research will also be required within the area of sexual functioning, as previous research has incorrectly equated this with physiological functioning; existing findings may not account for the entire spectrum of sexual experience.

Sex therapists and their clients can aim for much loftier goals than merely removing sexual dysfunctions and (hypothetically) restoring functionality. The eight major and two minor components identified in optimal sexual experiences suggest areas that clients might wish to target for improvement. Clients, especially those diagnosed with hypoactive sexual desire disorder, would be encouraged to cultivate sex that is worth wanting. This research also provides an alternative to the performance paradigm espoused by media sources (e.g., lifestyle magazines, self-help books). Members of the general public would be encouraged to redefine optimal sexual experience for themselves rather than relying on myth-ridden, inaccurate stereotypes presented in the media. There is hope for those whose sexuality has been marginalized from mainstream discourses, whether because of age, ▶ disability status, sexual orientation, or for other reasons.

Cross-References

- ▶ Lessons About Optimal Sexual Experiences From Remarkable Lovers
- ▶ Personal Contributions to Optimal Sexual Experiences
- ▶ Relational Contributions to Optimal Sexual Experiences

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Composite Governance Indicators

► Aggregated Governance Indicators

Composite Index

► Capability, Functioning, and Resources

Composite Index Construction

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Synonyms

Aggregate social indicators construction; Summary quality of life indices

Definition

Social scientists study and develop measures, indicators, or indices of *overall well-being/quality of life (WB/QOL)* for individuals living in specific communities/countries/societies at specific points in time. Policy makers increasingly study such measures, indicators, and indices and seek to develop public policies and practices that improve overall WB/QOL.

Ultimately, however, each individual is responsible for assessing her/his overall WB/QOL. This can be done, for example, by comparing her/his contemporary circumstances to those of a previous time and/or by comparing her/his circumstances to those of others at the same time but living in another location. To do so, an individual must, at least informally, engage in the following activities: (1) select the indicators of those aspects of life circumstances that are important to her or him, (2) obtain data from social reports or other news sources on changes in those indicators or in comparison to other locations, and (3) integrate those

indicators across disparate aspects or domains of life to achieve a judgment of overall progress or relative status on WB/QOL. ▶ Composite index construction in ▶ quality of life research is a systematization of this informal comparison process.

Description

Examples of Composite Well-Being/Quality of Life Indices

Composite indices are widely used in modern societies with many long-standing examples being indices of one aspect or another of the economy. Common examples include stock market price indices, consumer price indices, and consumer confidence indices. The use of composite indices in WB/QOL studies is a more recent development. Some examples are:

- The ▶ Human Development Index (HDI; United Nations Development Program, 2001)
- The ▶ Index of Economic Well-Being (IEWB; Osberg & Sharpe, 2000)
- The National Well-Being Accounts (NWBA; Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004)
- The ▶ Index of Social Progress (ISP; Estes, 1988, 1997)
- The ▶ Happy Life-Expectancy Scale (HLE; Veenhoven, 1996)
- The ▶ Netherlands' Living Conditions Index (LCI; Boelhouwer & Stoop, 1999)
- *The Economist* Intelligence Unit's Quality of Life Index (EIU-QOLI; The Economist Intelligence Unit 2005)
- The Australian Unity Well-Being Index (AUWBI; Cummins, Woerner, Tomyn, Gibson, & Knapp, 2005)
- The Foundation for Child Development ▶ Child and Youth Well-Being Index (FCD-CWI; Land, Lamb, & Mustillo, 2001; Land, Lamb, Meadows, & Taylor, 2007)

Some of these composite indices, such as the HDI, were developed mostly for cross-sectional comparisons among geographical units such as nations, and others, such as the LCI, were developed mostly for over-time comparisons within units, but most of them can be used in both cross-sectional and over-time comparisons.

Principles for Constructing Composite WB/QOL Indices

Hagerty and Land (2012) stated seven principles for the construction of composite WB/QOL indices. These can be summarily stated:

- Each of the indicators that compose an index should be reliable and valid.
- For transparency, a WB/QOL index should not be reported alone, but as part of a report that shows each underlying indicator.
- A WB/QOL index should be disaggregated, or at least be capable of disaggregation, for population subgroups.
- A WB/QOL index should be robust to incomplete data or other data problems.
- A WB/QOL index should reflect the best model of how people actually make WB/QOL judgments for themselves.
- A WB/QOL index should reflect the weights that individuals give to indicators and domains of well-being.
- For use in policy formation, analysis, and decisions, a WB/QOL index should be accepted by a large majority of individuals in a governmental entity.

While each of these principles may seem relatively simple and straightforward, they are important and strong criteria and may require considerable research work for verification.

The Weighted Average Model of WB/QOL Judgments

With regard to the fifth principle, based on evidence from prior subjective well-being studies, Hagerty & Land (2007, 2012); adopted a weighted average description of individuals' WB/QOL judgments. This description states, for example, that if the judgment task is, say, one of comparing WB/QOL among a set of countries, as in the HDI, and if we define individual i's *importance weight* for the kth social indicator

as w_{ik} and i's overall QOL judgment for country n as Q_{in}, then we can predict their QOL judgments with the *weighted average model (WAM)*:

$$Q_{in} = \Sigma_k \, w_{ik} x_{kn}, w_{ik} > 0, \text{ for } n = 1, \ldots, N \text{ countries},$$

where x_{kn} is the score for the kth social indicator of country n, K is the total number of social indicators that individuals use to make their judgments of QOL, and the summation is taken over all K indicators. Adopting this additive model also benefits the fourth principle of WB/QOL index construction stated above, since additive models are quite robust to errors in measurement.

Using the WAM and a correlation coefficient measure of agreement between two WB/QOL indices, Hagerty and Land (2007) calculated the average agreement between the HDI (which uses equal weights of its three country-level indicators of health, education, and material well-being – life expectancy at birth, a normalized index of mean years of schooling of adults age 25 and expected years of schooling for current students, and gross national income per capita, respectively) and the rankings of countries that results from using weights from a sample survey of 1502 US citizens in the World Values Survey (WVS; Inglehart et al., 2000). Mean agreement between the HDI index ratings of QOL and the 1502 individuals' ratings (predicted from their weights) was + .97 (standard error of estimate = .04).

This is remarkably high. Hagerty and Land (2007) probed why agreement should be so high even though the equal weighting in the HDI differs from the unequal weights that individuals report in the WVS. Using the WAM of QOL judgments, they proved mathematically that several factors affect agreement for any index. Specifically, they show that agreement will be higher when:

1. The index is based on cross-sectional data rather than time-series data.
2. The distribution of individuals' weights is unimodal rather than bimodal (as in abortion where conflict is much higher because weights are extreme and bimodal).
3. The distribution of individuals' weights is not negatively correlated across indices (people who highly value one indicator always place a very low value on another indicator).
4. Individuals' weights are all positive (or all negative) for each indicator.

The HDI and the WVS conform to all four of these properties. Hence, the agreement induced by the equal weights used in HDI is quite high compared to the index calculated using the unequal weights that are reported in the WVS.

Using the WAM of WB/QOL judgments, Hagerty and Land (2007) also showed mathematically that:

- If a survey is available to measure the distribution of individuals' importance weights for each indicator, then there exists *an optimal weighting scheme* – specifically, agreement is maximized when the index is constructed using the mean weights of individuals in the population.

But, since such surveys are often not available, they also proved that:

- Constructing an index with equal weights produces what in statistics is termed *a minimax estimator* (i.e., equal weighting will minimize maximum possible disagreements).

The importance of this second property pertains to the fact that many existing WB/QOL indices, such as the HDI and several others cited above, have used equal weighting of their component indicators and/or domains of well-being because of the simplicity and transparency of equal weights and the lack of a strong rationale for an unequal weighting scheme. Within the context of the WAM, the minimax statistical properties of the equal weighting method now have been established.

The Weighted Product Model of WB/QOL Judgments and Data Envelopment Analysis

Using similar notation, the *weighted product model (WPM)* of well-being/quality of life judgments can be written as

$$Q_{in} = \Pi_k \left[\left(x_{ik} \right)^{w_{ik}} \right], w_{ik} > 0,$$

where the product is taken over all K units being compared.

Note that the weighted average model described above can be viewed as a logarithmic transformation of the weighted product model.

Zhou, Ang and Zhou (2010) studied the WPM and proposed a multiplicative optimization extension thereof by application of ▶ data envelopment analysis (DEA)-type methods to determine the values of weights of individual indicators in a composite index such as the life expectancy, education, and gross domestic product per capita indicators used to calculate the Human Development Index. The DEA method originally was developed for efficiency analysis in economics and management science (Charnes, Cooper, & Rhodes, 1978; Charnes, Cooper, Lewin, & Seiford, 1994; Land, Lovell, & Thore, 1993). It transforms a multiplicative optimization problem into a series of linear programming problems (Danzig, 1963) in which weights for composite scores are determined by internal comparisons of each of a set of entities with each other with respect to their efficiency in producing outputs (e.g., consumer products) from given levels of inputs (e.g., labor, capital).

Zhou, Ang, and Zhou (2010) applied DEA to calculate two sets of weights for the component indicators of a composite QOL index – a set of "best" weights for each entity calculated in comparison to the "best practice" entity or entities on each specific indicator and a set of "worst" weights calculated in comparison to the "worst practice" entity or entities on each specific indicator. They then calculated composite index scores for each entity being compared as weighted averages of logarithmic transformations of the two sets of weights and, in the absence of "decision makers or analysts [having] no particular preference" (Zhou, Ang, & Zhou, 2010, p. 173) for one set of weights or the other, suggest equal weighting as a "fairly neutral choice." Note, however, that, as summarized above, Hagerty and Land (2007) have shown that equal weighting methods have minimax statistical properties in the sense that they minimize extreme disagreements on weights. This gives a precise statistical meaning to the equal weights as a neutral choice.

Zhou, Ang, and Zhou (2010) suggested, in addition, that this extension of the WP method can provide an alternative to subjectively determined weights for composite indices. Given the logarithmic relationship between the WAM and WPM models of WB/QOL judgments, however, it is entirely possible that individuals as well as decision makers and analysts use an informal version, or at least some approximation thereto, of the equal weighting of "best practice" (distance from the best-performing unit(s)) and "worst practice" (distance from the worst-performing unit(s)) relative rankings to arrive at composite index scores/summary judgments. Thus, rather than being alternatives, the DEA-weighted average approach may, in fact, be a representation of the cognitive processes by which subjective WB/QOL judgments are made.

Other Methods of Composite WB/QOL Index Construction

In addition to the WAM, WPM, and DEA methods, a number of additional methods or general composite index construction (not limited to WB/QOL indices) are described in Nardo, Saisana, Saltelli, Tarantola, Hoffman, and Giovannini (2005).

Cross-References

- ▶ Canadian Index of Well-being
- ▶ Subjective Weighting
- ▶ Weighting Schemes

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Composite Index of National Capabilities (CINC)

► Measures of National Power

Composite Index of Quality in Work in Spain

► Work Index in Span, Quality of

Composite Indicator(s)

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Synonyms

Aggregate measures; Composite indices; Indices; League tables; Multidimensional measures; Rankings of components; Ratings of components

Definition

Multidimensional measures, else termed composite indicators, are meant to give signals of

society's performance in complex fields, such as innovation, competitiveness, and poverty. They are calculated as a function of indicators and weights, ideally based on a conceptual or theoretical framework of the issue being tackled. Weights may represent the relative importance of each indicator or be implied by the data. The function may involve linear or geometric averaging or use of outscoring matrix in a multi-criteria setting (Munda, 2004). In their simplest and most frequent form, composite indicators are built by averaging normalized country values across a set of indicators.

Description

The rising popularity of composite indicators – almost sevenfold over the last 7 years (a query "composite indicators" on Scholar Google resulted in 992 hits on October 2005 and are 7,740 hits on October 2012) – may be due to the temptation of simplification: "the temptation of stakeholders and practitioners to summarize complex and sometimes elusive process (e.g., sustainability or a single-market policy) into a single figure to benchmark country performance for policy consumption seems irresistible" (Saisana, Saltelli, & Tarantola, 2005). Thus, the construction of a composite indicator would be driven by the need for generation of narratives for advocacy in intellectual debates (Saltelli, 2007).

The Consumer Price Index, for example, that considers the costs of about 60 goods and services purchased monthly by a typical household offers a more complete picture of the relative cost of living in different countries than would the price of a single item (e.g., bread or fuel).

A list – merely informative and certainly not exhaustive – of composite indicators in the field of well-being and quality of life includes the Human Development Index (UN, 2011), the Canadian Index of Well-being (2012), the Australian Unity Well-being Index (2012), the Gallup-Healthways Well-Being Index (2011), the Mercer (2011), the Legatum Prosperity Index (2012), the International Living's Annual Quality of Life Index (2011), the Genuine Progress Indicator (2006), the Regional Index of Sustainable Economic Well-being (2010), the Happy Planet Index (2012), and the OECD (2011).

The OECD-JRC *Handbook on Composite Indicators* (OECD/EC JRC, 2008) offers a review and guidelines on constructing such aggregate measures, and an information server on the topic is available at a European Commission site (http://ipsc.jrc.ec.europa.eu/?id=739).

Table 1 presents a "decalogue" for the construction of a composite indicator, which has been rearranged and extended from the information contained in the OECD/JRC Handbook. These steps have been put in practice when auditing, upon request of their developers, multidimensional measures such as the UN Multidimensional Poverty Assessment Tool (Saisana & Saltelli, 2010a), the Composite Learning Index (Saisana, 2008), the Environmental Performance Index (Saisana & Saltelli, 2010a), the Alcohol Policy Index (Brand, Saisana, Rynn, Pennoni, & Lowenfels, 2007), and the Index of African Governance (Michaela, Paola, & Michela Nardo, 2009) just to name a few.

This short guide stresses the importance of conducting an internal coherence assessment prior to the uncertainty and sensitivity analysis, so as to further refine and eventually correct the composite indicator structure. Expert opinion is needed in this phase in order to assess the results of the statistical analysis. Second, it stresses that there is a trade-off between multidimensionality and robustness in a composite indicator. One could have a very robust yet mono-dimensional index or a very volatile yet multidimensional one. This does not imply that the first index is better than the second one. In fact, this table suggests treating robustness analysis NOT as an attribute of a composite indicator but of the inference which the composite indicator has been called upon to support. Third, it highlights the iterative nature of the ten steps, which although presented consecutively in the handbook, the benefit to the developer is in the iterative nature of the steps.

Composite Indicator(s), Table 1 A decalogue for composite indicator construction

Step 1. Theoretical/conceptual framework
Provides the basis for the selection and combination of variables into a meaningful composite indicator under a fitness-for-purpose principle (involvement of experts and stakeholders is important)
Clear *understanding* and *definition* of the multidimensional phenomenon to be measured
Discuss the *added value* of the composite indicator
Nested structure of the various subgroups of the phenomenon (if relevant)
List of *selection criteria* for the underlying variables, for example, input, output, process
Step 2. Data selection
Should be based on the analytical soundness, measurability, country coverage, and relevance of the indicators to the phenomenon being measured and relationship to each other. The use of proxy variables should be considered when data are scarce (involvement of experts and stakeholders is important)
Quality assessment of the available indicators
Discuss *strengths and weaknesses* of each selected indicator
Summary table on data characteristics, for example, availability (across country, time), source, type (hard, soft, or input, output, process), and descriptive statistics (mean, median, skewness, kurtosis, min, max, variance, histogram)
Step 3. Data treatment
Consists of imputing missing data, (eventually) treating outliers, and/or making scale adjustments
Confidence interval for each imputed value that allows assessing the impact of imputation on the composite indicator results
Discuss and treat outliers, so as to avoid that they become unintended benchmarks (e.g., by applying Box-Cox transformations such as square roots, logarithms, and others)
Make scale adjustments, if necessary (e.g., taking logarithms of some indicators, so that differences at the lower levels matter more)
(*Back to Step 2*)
Step 4. Multivariate analysis
Should be used to study the overall structure of the dataset, assess its suitability, and guide subsequent methodological choices (e.g., weighting, aggregation)
Assess the s*tatistical and conceptual coherence in the structure* of the dataset (e.g., by principal component analysis and correlation analysis)
Identify *peer groups of countries* based on the individual indicators and other auxiliary variables (e.g., by cluster analysis)
(*Back to Step 1 and Step 2*)
Step 5. Normalization
Should be carried out to render the variables comparable
Make *directional adjustment*, so that higher values correspond to better performance in all indicators (or vice versa)
Select a *suitable normalization method* (e.g., min-max, z-scores, and distance to best performer) that respects the conceptual framework and the data properties
Step 6. Weighting and aggregation
Should be done along the lines of the theoretical/conceptual framework
Discuss whether *compensability* among indicators should be allowed and up to which level of aggregation
Discuss whether *correlation* among indicators should be taken into account during the assignment of weights
Select a *suitable weighting and aggregation method* that respects the conceptual framework and the data properties. Popular weighting methods include equal weights, factor analysis-derived weights, expert opinion, and data envelopment analysis. Popular aggregation methods include arithmetic average, geometric average, Borda, and Copeland
Internal coherence assessment (intermediate step)
This step is briefly listed under step 9 in the Handbook but not thoroughly discussed. This assessment needs to be undertaken prior to the uncertainty and sensitivity analysis, so as to further refine the composite indicator structure (upon consultation with experts on the issue)
Assess whether *dominance problems are present*, namely, the composite indicator results are overly dominated by a small number of indicators and quantify the relative importance of the underlying components (e.g., by global sensitivity analysis, correlation ratios)

(*continued*)

Composite Indicator(s), Table 1 (continued)

Assess eventual "noise" added to the final composite indicator results by non-influential indicators
Assess the *direction of impact of indicators and subdimensions*, namely, whether all components point to the same direction as the composite indicator (sign of correlation) and explain trade-offs
Assess whether certain *indicators are statistically grouped under different dimensions* than conceptualized and whether certain *dimensions should be merged or split*
Assess *eventual bias* introduced in the index (e.g., due to population size, population density)
(*Back to Step 1 and Step 2*)
Step 7. Uncertainty and sensitivity analysis
Should be undertaken to assess the robustness of the composite indicator scores/ranks to the underlying assumptions and to identify which assumptions are more crucial in determining the final classification. Important to note the trade-off between multidimensionality and robustness in a composite indicator, given that a mono-dimensional index is likely to be more robust than a multidimensional one. This does not imply that the first index is better than the second one. In fact, robustness analysis should NOT be treated as an attribute of the composite indicator but of the inference which the composite indicator has been called upon to support
Consider *different methodological paths* to build the index, and if available, *different conceptual frameworks*
Identify the sources of uncertainty underlying in the development of the composite indicator and provide the *composite scores/ranks with confidence intervals*
Explain why certain countries notably improve or deteriorate their relative position given the assumptions
Conduct *sensitivity analysis* to show what sources of uncertainty are more influential in determining the scores/ranks
Step 8. Relation to other indicators
Should be made to correlate the composite indicator (or its dimensions) with existing (simple or composite) indicators and to identify linkages through regressions
Correlate the composite indicator with relevant measurable phenomena and explain similarities or differences
Develop *data-driven narratives* on the results
Perform *causality tests* (if time series data are available)
Step 9. Decomposition into the underlying indicators
Should be carried out to reveal drivers for good/bad performance
Profile country performance at the indicator level to reveal strengths and limitations
Perform *causality tests* (if time series data are available)
Step 10. Visualization of the results
Should receive proper attention given that it can influence (or help to enhance) interpretability
Identify *suitable presentational tools* for the targeted audience
Select the *visualization technique which communicates the most information without hiding vital information*
Present the results in a clear, *easy to grasp and accurate manner*

Note: Rearranged (and extended) from the OECD/JRC (2008) *Handbook on Composite Indicators*

Discussion

There are two polarized schools of thought regarding the uses and misuses of composite indicators. Andrew Sharpe (2004) summarizes: "The aggregators believe there are two major reasons that there is value in combining indicators in some manner to produce a bottom line. They believe that such a summary statistic can indeed capture reality and is meaningful, and that stressing the bottom line is extremely useful in garnering media interest and hence the attention of policy makers. The second school, the non-aggregators, believe one should stop once an appropriate set of indicators has been created and not go the further step of producing a composite index. Their key objection to aggregation is what they see as the arbitrary nature of the weighting process by which the variables are combined." Along the same lines, Saisana et al. (2005) argue that the perpetual debate on the use of composite indicators finds official statisticians, on one side, unwilling to waste or hide information behind a single number of dubious significance and stakeholders, on the other, tempted to summarize complex and at times elusive processes (e.g., sustainability, welfare) into easy-to-communicate numbers.

Phenomena described by composite indicators are complex; think of concepts such as welfare, quality of education, or sustainability. The aim is to reduce complexity down to a measurable form by replacing nonmeasurable phenomena with intermediate objectives whose achievement can be observed and measured. No matter how subjective and imprecise such an attempt maybe, it implies the recognition of the multidimensional nature of a phenomenon to be measured and the effort of specifying the single aspects and their interrelation. The reduction into parts has limits when crucial components of the system are not considered. Despite the vast issue of quality of statistical information, there is one fact that is essential for the use of composite indicators. This is the existence of a community of peers (be these individuals, regions, countries) willing to accept composite indicators as their common yardstick for identifying limitations and promoting good practices. In fact, acceptance of a composite indicator relies on both strong scientific basis for its development and, maybe more important, on negotiation (Funtowicz & Ravetz, 1990).

Our society is changing so fast that we need to know as soon as possible when things go wrong. Without rapid alert signals, appropriate corrective action is impossible. This is where composite indicators could be used as yardstick. Whether or not one accepts composite indicators for the purpose of benchmarking performance, one might find itself, even unwillingly, exposed to a composite indicator published in the news. A bottleneck conclusion is that composite indicators should never be seen as a goal, per se, regardless of their quality. They should be seen, instead, as a starting point for initiating discussion and attracting public interest and concern.

Cross-References

- ▶ Canadian Index of Well-being
- ▶ Composite Water Quality Index
- ▶ Consumer Price index
- ▶ Genuine Progress Index
- ▶ Happy Planet Index
- ▶ Human Development Index (HDI)
- ▶ Life Quality Index
- ▶ Quality of Life Index

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Composite Indices

▶ Composite Indicator(s)

Composite Measure of Happiness

▶ Happy Life Inventory

Composite Water Quality Index

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Synonyms

Canadian Water Quality Index (CWQI); Water Quality Composite Index (WQCI); Water Quality Index (WQI); Water Quality Index for Biodiversity (WQIB)

Definition

A water quality index (WQI) summarizes in a single number (e.g., grade) overall water quality at a certain location and time based on several water quality parameters. Examples of water quality parameters include temperature, dissolved oxygen (percent saturation and concentration), biochemical oxygen demand, pH, total solids, electrical conductivity (salinity), ammonia and nitrate nitrogen, total phosphorus, bacteria, and others.

The objective of this type of index is to turn complex water quality data into information that is understandable and useable by the public. This type of index is similar to the index developed for air quality, showing if it is a red or blue air quality day. Similarly, a water quality index evaluates and ranks the quality of water bodies for various beneficial uses of water, such as habitat for aquatic life, irrigation water for agriculture and livestock, recreation and aesthetics, and drinking water supplies. The use of an index to "grade" water quality is a controversial issue among water quality scientists. A single number cannot reveal the whole story of water quality given that not all water quality parameters can be included in the index. However, a water index based on some very important parameters can provide an indication of water quality as to possible problems related to the water in a given area/region.

Description

Clean water is one of the most important elements to sustain good health. Water quality is often assessed as Excellent, Acceptable, Slightly Polluted, Polluted, or Heavily Polluted according to guidelines and standards set by the World Health Organization (World Health Organization [WHO], 2004) and the European Union (2012).

Water quality indices are being developed to give an overall picture of the state of a regional system, taking into account information from a number of sources and variables, and provide a benchmark for evaluating successes or failures

of management strategies, or are simply intended to informing the general public. Most water quality indices rely on normalizing data, parameter by parameter, with respect to "accepted" concentrations. Next, these parameters are weighted based on their perceived importance to overall water quality and a final index is then calculated using some form of a weighted average of all variables of interest.

The Canadian Water Quality Index (CWQI) is a well-known index that captures the scope, frequency, and extent to which parameters exceed their respective guidelines at each monitoring station (CCME, 2001; Khan, Husain, & Lumb, 2003; Lumb, Halliwell, & Sharma, 2006).

The CWQI is flexible in terms of the benchmarks that are used for calculation; it can be adjusted to quantify ecological health of the water, or drinking water quality safety, or deviation from natural conditions, and others. The CWQI is calculated on an annual basis resulting in an overall rating for each station per year. The CWQI is calculated using three factors as follows:

$$\mathrm{CWQI} = 100 - \left(\frac{\sqrt{F_1^2 + F_2^2 + F_3^2}}{1.732}\right)$$

where the notation is:

F_1 is the scope (the percentage of parameters that exceeds the guideline):

$$F_1 = \left(\frac{\#\,\text{failed parameters}}{\text{Total}\ \#\,\text{of parameters}}\right) \times 100$$

F_2 is the frequency (the percentage of individual tests within each parameter that exceeded the guideline):

$$F_2 = \left(\frac{\#\ \text{failed tests}}{\text{Total}\ \#\,\text{of tests}}\right) \times 100$$

F_3 is the amplitude (the extent (excursion) to which the failed test exceeds the guideline). This is calculated in three stages. First, the excursion is calculated as:

$$\text{excursion} = \left(\frac{\text{failed test value}}{\text{guideline value}}\right) - 1$$

Second, the normalized sum of excursions *nse* is calculated as follows:

$$\text{nse} = \left(\frac{\sum \text{excursion}}{\text{total}\ \#\ \text{of tests}}\right)$$

F_3 is then calculated using a formula that scales the *nse* to range between 1 and 100:

$$F_3 = \left(\frac{\text{nse}}{0.01\text{nse} + 0.01}\right)$$

The denominator 1.732 in the formula of the CWQI arises because each of the three individual index factors can range as high as 100. This means that the vector length can reach:

$$\sqrt{100^2 + 100^2 + 100^2} = \sqrt{3000} = 173.2$$

as a maximum. Division by 1.732 brings the vector length down to 100 as a maximum [3].

The CWQI is measured between 1 and 100, with 1 indicating the poorest and 100 indicating the best water quality. Within this range, designations have been set by CCME (2005) to classify water quality as Poor (CWQI score 0–44), Marginal (CWQI score 45–64), Fair (CWQI score 65–79), Good (CWQI score 80–94), and Excellent (CWQI score 95–100).

Discussion

Domestic industrial activity, agriculture, and sewage are major sources of pollution for drinking water. According to WHO survey (2004), 60 % of the diseases in Asian countries are waterborne. It comes as no surprise, thereafter, the abundance of studies attempting to summarize water quality in single numbers and to further assess the impact of various parameters on water quality in different regions or countries (Ferreira, Bonetti, & Seiffert, 2011;

Composite Water Quality Index, Table 1 Summary of water quality indicators

Index	Objective	Method	Distribution
The Scatterscore Index	Water quality	Assesses increases/decreases in parameters over time and/or space	USA
The Well-Being of Nations	Human and ecosystem	Assesses human indices against ecosystem indices	Global
Environmental Performance Index	Human and ecosystem Environmental health and vitality	Assesses human indices against ecosystem indices	Global
Index of River Water Quality	River health	Assesses and classifies a number of water quality parameters	Taiwan
Overall Index of Pollution	River health	Assesses and classifies a number of water quality parameters	India
Chemical Water Quality Index	Lake basin	Assesses and classifies a number of water quality parameters	USA
Water Quality Index for Freshwater Life	Inland waters	Assesses quality of water against guidelines for freshwater life	Canada
Environmental Sustainability Index	Environment	Assesses the ability of nations to protect the environment	Global
Environmental Performance Index	Environment	Assesses the ability of nations to protect the environment	Global
Global Drinking Water Quality Index	Drinking water sources	Assesses the quality of drinking water sources	Global
Sustainable Society Index	Sustainability societies	Assesses concepts underlying a sustainable society, such as biodiversity, good governance, and healthy life	Global
Oregon Water Quality Index	Water sources	Assesses network of ambient water quality monitoring sites	State of Oregon
Water Quality Index for Biodiversity	Water sources	Assesses the changes in water quality	Global
Water Poverty Index	Water poverty	Summarizes global efforts to tackle water problems	Global

Kim & Cardone, 2005; Lal, 2011; Liou, Lo, & Wang, 2004; Stambuk-Giljanovik, 2003; Tsegaye et al., 2006; Pesce & Wunderlin, 2000).

Besides the Canadian Water Quality Index described above, another well-known example is the Water Quality Index for Biodiversity (WQIB), developed by the United Nations Environment Programme Global Environment Monitoring System (Carr & Rickwood, 2007). The WQIB uses data that is collected and compiled from more than 6,200 water monitoring stations around the globe. By examining changes in water quality at each of these stations over time, it becomes possible to determine if water quality is declining, remaining stable, or improving with regard to its ability to sustain biodiversity. Along similar lines, the Water Poverty Index (WPI) (Sullivan & Meigh, 2003; Sullivan, Meigh, & Fediw, 2002) aims to contribute to the global effort to tackle water problems and to enable more holistic water-resource assessments made on a site-specific basis.

Water quality is also a constituent element of aggregate environmental indices, such as the Environmental Performance Index (Emerson et al., 2012), the Environmental Sustainability Index (Esty, Levy, Srebotnjak, & de Sherbinin, 2005), the Sustainable Society Index

(Van de Kerk & Manuel, 2010), the Oregon Water Quality Index (Oregon Department of Environmental Quality Laboratory, 2012), or the Well-being of Nations (Prescott-Allen, 2001; Sargaonkar & Deshpande, 2003). A summary of water quality indices is given in Table 1.

Cross-References

- Biodiversity Conservation
- Drinking Water
- Water Consumption
- Water Poverty Index

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Compositional Variables

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Definition

Ecological: Among many fields of research concerned with the health and well-being of humans – for example, population health, epidemiology, sociology, and health geography – the word ecological is often used to refer to phenomena occurring at a group level as opposed to those occurring at individual level.

Multilevel analysis: Multilevel analysis refers to a statistical approach that simultaneously examines factors occurring at different analytic and often nested levels (commonly individual and ecological levels) to explain variations in individual-level health outcomes.

Description

Compositional variables are ecological-level variables constructed from aggregation of individual attributes – such as sums, rates (proportions), averages, and medians – in each subgroup involved in a study population. Examples of compositional variables in health research include average income, employment rates, proportion of adults with postgraduate education, and proportion of ethnic minorities. These variables are factors that affect disease and health outcomes of individuals and groups (Pampalon et al., 2009).

Compositional variables are typically used in three ways. First, they are used as a proxy for individual level factors because the data are only available at an aggregate level. For example, average individual income by neighborhood may be used as a proxy for individual income (Mustard, Derksen, & Berthelot, 1999). Such use makes an assumption that everyone living in the same neighborhood has similar income status, which may not always be the case.

Second, compositional variables are used as representative of *compositional effects*. These effects occur when group-level health outcomes such as disease and mortality rates in the population are different because of the composition of individuals within the group (Duncan, Jones, & Moon, 1998; Diez Roux, 2000). For example, individuals that are older, members of visible minority and minority language groups, and low-income earners are at a greater risk of some diseases, no matter where they live (Frohlich, 2000). The concentration of individuals with these characteristics in a specific group will raise the average rate of diseases in the group. Among studies of how places influences health outcomes, compositional effects are often treated as something separate from *true* ecological effect in a statistical analysis (Frohlich, 2000).

Third, some compositional variables represent more than an aggregation of individual characteristics, since the predominant characteristics of individuals "may influence the predominant types of interpersonal contacts, values, and norms" (Diez Roux, 1998). These compositional variables are also called *derived variables* (Diez Roux, 2000). The composition of individuals may create *opportunity structures* (Macintyre, Ellaway, & Cummins, 2002) – resources available to the entire group to promote and maintain health and well-being. Neighborhood level socioeconomic status (SES), for example, is commonly derived from variables that include average individual income, proportion of postgraduate degree holders, and employment rate. A higher-income neighborhood has the tax base that affords maintenance of street aesthetics and safety, thus promoting physical activities outdoors.

The interpretation of compositional variables is not straightforward, particularly, because variables as a proxy for individual characteristics, as compositional effects, and as derived variables often look exactly the same (e.g., average neighborhood income and SES). Some variables can be

more than one of these three types, representing several different constructs (Frohlich, 2000; Macintyre et al., 2002).

Efforts have been made to clearly conceptualize the mechanisms through which individual- and ecological-level factors together manifest in the health of individuals, often using multilevel analysis (Krieger, 2005). Still, few studies have made clear the meanings of variables employed in their analyses based on these mechanisms (O'Campo, Salmon, & Burke, 2009). Further clarification of the interrelationships between environmental and biological influences and health will help better guide proper use of compositional variables.

Cross-References

- ▶ Ecological Fallacy
- ▶ Neighborhood Effects
- ▶ Place-Related Measures

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Compound Family

- ▶ Family Structure

Comprehensive Air-Quality Index (CAI)

- ▶ Air Quality

Compulsive Sexual Behavior (CSB)

- ▶ Compulsive Sexual Behavior Inventory

Compulsive Sexual Behavior Inventory

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Synonyms

Addiction, sexual; Compulsive sexual behavior (CSB); Compulsive sexual behavior inventory (CSBI); Compulsivity, sexual; Dependence, sexual; Excessive sexual behavior; Hypersexual disorder; Sexual impulse control; Sexual impulsivity

Definition

Compulsive sexual behavior (CSB), also referred to as "sexual compulsivity" or "sex addiction," is a clinical phenomenon characterized by sexual fantasies and behaviors that increase in frequency and intensity sufficiently enough to interfere with personal, interpersonal, or vocational pursuits (Muench & Parsons, 2004). CSB has been associated with higher frequencies of sexual behaviors that increase risk for the transmission of the human immunodeficiency virus (HIV) and other sexually transmitted infections (STI)s (Gullette & Lyons, 2005; Satinsky et al., 2008).

Description

Although professionals have estimated the prevalence of CSB to be between 3 % and 6 % of the total adult US population (Carnes, 2001; Miner, Coleman, Center, Ross, & Rosser, 2007), at present, consensus has not been reached as to an official name for CSB, let alone clinical definition or diagnostic criterion. While the empirical evidence for the validity of CSB may currently be lacking, there does exist an abundance of clinical and epidemiological support for the presence of this *disorder* (Winters, 2010). Kafka (2010) has also demonstrated a clear association between CSB, association between CSB, HIV, STIs, and alcohol and drug abuse.

Compulsive sexual behavior has been estimated to negatively affect 3–6 % of the US population (Carnes, 1991, 2001). Currently, most researchers would agree that compulsive sexual behavior is neither a question of aberrant behavior nor mere quantity. Rather, compulsive sexual behavior is identified when the behavior presents a disturbance in the individual's normal daily functioning.

Although compulsive sexual behavior is not currently formally accepted as a psychiatric disorder, Kafka (2010) advocates for the inclusion of "hypersexual disorder" in the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-V). Previously, there have been several attempts to design a measure for the assessment of compulsive sexual behavior. Past studies have found compulsive sexual behavior to be highly related to number of sexual partners, sexual risk taking, self-report of substance use, having paid for sex, and being resistant to HIV risk reduction (Carnes, 1991; Coleman, Raymond, & McBean, 2003; Kafka, 2010). Because of the associations found between these behavioral health risks and compulsive sexual behavior, it is paramount that a diagnostic tool be developed in order to accurately assess compulsive sexual behavior. Recently, the Compulsive Sexual Behavior Inventory (CSBI; Coleman, Miner, Ohlerking, & Raymond, 2001) has gained in popularity among researchers and clinicians because of its focus on the detriments caused to the individual's daily functioning, rather than on strict quantifications of sexual partners or orgasms, as some of the preceding diagnostic measures have done. The CSBI is currently the only published scale that is purported to measure all major components of compulsive sexual behavior (Coleman et al., 2001). That is to say, the CSBI measures a constellation of sexual behaviors defined as being extreme in both number and intrusiveness, engaged in as a moderator of emotional issues, and involving a significant disruption in normal interpersonal functioning (Miner et al., 2007).

If the CSBI is to be used as a clinical tool for determining the need for intervention or treatment of compulsive sexual behavior, then the lack of a scientifically derived cut point at which the scale discriminates between sexually compulsive persons and nonsexually compulsive persons is detrimental to clinicians' ability to appropriately identify patients. Storholm, Fisher, Napper, Reynolds, and Halkitis (2011) utilized receiver operating characteristic (ROC) curve analyses in order to determine a tentative indication of what might be a clinically useful cut point for the CSBI. These analyses simultaneously provided the CSBI with much needed evidence of both construct and criterion-related validity.

Compulsive Sexual Behavior Inventory

The 22-item CSBI assesses difficulty controlling sexuality, feeling emotionally distant during sex, experiences with physical and sexual aggression in dating relationships, experience giving or receiving pain for sexual pleasure, and legal, financial, or relationship problems stemming from sexual behavior. Items also assess the tendency to use sex to cope with guilt, shame, secretiveness, or other problems surrounding sexual behavior. In the Storholm et al. (2011) study, a convenience sample of 482 nonclinical participants rated how frequently they engaged in each of the items, with response ranging from (1) never to (5) very frequently. Items were then totaled allowing participants to have an absolute score ranging from 22 to 110. The mean score, for the sample, on the CSBI was 39.81 ($SD = 14.24$) and the median score was 38.

In the Storholm et al. (2011) study, correlation and *t*-test analyses were first utilized in order to identify statistically significant associations between scores on the CSBI and the self-report of risky sexual behavior and drug abuse. In order to control for the capitalization of chance among multiple comparisons in this analysis, a more conservative *p*-value of .01 was used in order to identify significant correlates. CSBI scores were found to be associated with both risky sexual behavior and drug abuse, thereby providing additional evidence of criterion-related validity. The variables that demonstrated a high association with the CSBI were then entered into a multiple regression model. Four variables (number of sexual partners in the last 30 days, having traded drugs for sex, having paid for sex, and perceived chance of acquiring HIV) were retained as variables with good model fit. The variables retained in the multiple regression model were then utilized as exploratory gold standards in constructing four ROC curves. Finally, the ROC curves were compared to one another in order to determine the best tentative cut point for assessing compulsive sexual behavior with the CSBI scale.

Given the absence of a true gold standard, the optimal tentative cut point for the CSBI among the total sample was determined by the point that maximized both sensitivity and specificity among the exploratory gold standards when plotting all possible scores on the CSBI. To further discern the optimal tentative cut point for the CSBI among the total sample, a Statistical Analysis Software (SAS) macro was used in order to create a single graph that simultaneously displayed the sensitivity, specificity, data density, and total accuracy for each of the exploratory gold standards that were determined a priori (Lambert, Lilly, & Lipkovich, 2008). The diagnostic sensitivity and specificity of the CSBI were both maximized at a score of 40. This was consistent across exploratory gold standards indicating that the best tentative cut point for assessing compulsive sexual behavior with the CSBI was found at point 40.

Discussion

Storholm et al. (2011) utilized dichotomized behavioral health variables to assess participants' "true status" of compulsive sexual behavior in order to conduct ROC curve analyses. The results indicated that when these variables were used as exploratory gold standards, the likelihood of sensitively and specifically identifying compulsive sexual behavior with the CSBI had an overall accuracy rate of 67 %. Accordingly, the authors suggest a score of 40 on the CSBI to be the most accurate tentative indication of a clinically useful cut point from which to identify compulsive sexual behavior when working with a combined sample of males and females with diverse sexual orientations and racial-ethnic backgrounds.

While Storholm et al. (2011) suggested that this tentative cut point would be useful for clinicians who wish to use the CSBI in order to assess compulsive sexual behavior among their clients, it is important to consider the possible consequences of acquiring the label of "sexually compulsive." One might argue that having high specificity may be valued over high sensitivity and therefore the cut point would need to be adjusted accordingly. While the diagnostic utility of the CSBI was found to be accurate 70 % of the time according the variable with the highest Area

under curve (AUC) (trading drugs for sex), it is important that future efforts assess clinical samples in an effort to increase the overall classification accuracy of this measure.

In conclusion, the Storholm et al. (2011) study provides evidence for the validity of the CSBI as a diagnostic tool for assessing compulsive sexual behavior. The study suggests that the CSBI is a good indicator of risk for acquiring HIV and/or another STI based on the association between compulsive sexual behavior and sexual risk. Accordingly, the authors suggest that a cut point of 40 consistently distinguishes participants along multiple behavioral risk behaviors and should be employed as a tentative cut point for the CSBI until further analyses are conducted among a clinical sample.

Cross-References

- ▶ Criterion Validity
- ▶ Moderators
- ▶ Pain
- ▶ Pleasure, Sexual
- ▶ Sensitivity
- ▶ Sexual Behavior(s)
- ▶ Sexual Orientation

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Compulsive Sexual Behavior Inventory (CSBI)

▶ Compulsive Sexual Behavior Inventory

Compulsivity, Sexual

▶ Compulsive Sexual Behavior Inventory

Computer-Assisted Interviews, Quality of Life

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Synonyms

Audio-computer-assisted self-interviews (ACASI); CATI with interactive voice response; Computer-assisted self-interviews (CASI); Computer-assisted telephone interviews (CATI); Video-CASI

Definition

Interviews in which computer technology is used or "computer-assisted interviews" include computer-assisted telephone interviews (CATI), computer-assisted self-interviews (CASI), audio-computer-assisted self-interviews (ACASI), video-CASI, and CATI with interactive voice response or touch-tone data entry (a.k.a. telephone ACASI or T-ACASI).

Description

Multiple technological advances have created various computer-assisted alternatives for conducting interviews or surveys. To conduct interviews with computer technology, computers are programmed to provide the questions, the response categories, interviewer instructions and probes, skip patterns, rotations, range checks, and other on-line consistency checks and procedures needed. Selection of a specific mode of delivery (e.g., by phone or in person) will depend on the relative costs and advantages of who/what asks the questions and records the answers.

In a CATI, an interviewer reads the preprogrammed questions on the computer screen, respondents answer verbally over the phone, and the interviewer keys the response on the computer keyboard. A CATI with interactive voice response simply replaces the live interviewer with a digitally recorded human voice which can effectively interact with respondents. To skip the costs of recording, text-to-speech systems can replace the human voice recordings with a computer-generated voice; voice or touch-tone entry can automatically record responses. In CATIs, computers can also be programmed to manage the sample information in its system and automatically generate telephone numbers at random; detect and filter out nonworking, fax, and modem numbers; automatically record all dialings; track the outcome of each interviewing attempt; and document the sources of ineligibility, the reasons for refusal, and the place of termination.

In CASI, respondents read the questions on the computer screen and record their own responses by either pressing numbered keys on the computer keyboard, clicking options on the screen with a mouse, or using touch screen monitors. ACASI allows respondents to listen to the questions through headphones while reading them on the computer screen. Video-CASI incorporates digital videos of interviewers reading the questions on the computer screen.

The use of computer-assisted interviews in ▶ quality of life research is very limited. In the past 5 years, a literature search of EMBASE, MEDLINE, and PsycINFO identified only 20 publications in which a validated measure of quality of life was used in a computer-assisted interview. Two studies identified in this search compared the reliability of quality of life measures across different types of data collection and showed similar results between paper and pencil and computer-assisted assessments (Ribeiro et al., 2010) and between ACASI and CATI assessments (Klevens et al., 2011).

Using computers to conduct interviews has many advantages. For example, computers will always conduct interviews in a standardized way. Compared to human interviewers, they are better at handling questionnaires with complex skip patterns. Computer-assisted interviews can reduce the costs of staffing and are more flexible for conducting interviews in multiple languages. Sample sizes can be substantially increased with little increase in costs. Computers can digitally record respondents' answers verbatim, if desired, eliminating the costs of transcription. Color images, photographs, and video can easily be incorporated into the interview for in-person self-interviews. Interactive voice response and text-to-speech technology can be used in phone interviews to match the voice to respondents' age, gender, and race or ethnicity or even allow respondents to choose between different options.

In general, computer-assisted interviews result in fewer errors in data collection (O'Reilly, Hubbard, Lessler, Biemer, & Turner, 1994) because the computer insures that there is

no variation in the manner or order in which questions are asked and can automatically detect answers out of range. Because data collection and data entry occur simultaneously, data can be extracted and analyzed with existing statistical packages directly from the system speeding the processing and analysis of the data. When self-administered, computerized interviews eliminate interviewer effects on respondents, reduce nonresponses to questions, and achieve higher disclosure rates for many sensitive health issues when compared to paper questionnaires or face-to-face encounters (Des Jarlais, Paone, & Millikenm, 1999; Gerbert et al., 1999; Gribble et al., 2000; Lapham, Kring, & Skipper, 1991; Newman et al., 2002; Paperny, Aono, Lehman, Hammar, & Risser, 1990; Rhodes, Lauderdale, He, Howes, & Levinson, 2002; Turner et al., 1998).

However, there are also some disadvantages to consider before opting for computer-assisted interviews. Programming computers to conduct interviews requires skilled staff and up-front costs in developing CASI or CATI software and purchasing the needed equipment. Computers, unlike trained interviewers, may be less persuasive or able to convince reluctant subjects to complete an interview, cannot paraphrase questions when respondents have problems understanding, and cannot respond to unexpected questions or provide customized feedback.

Although there are limited studies comparing the different technologies available, in general, there seem to be few differences in the results obtained. For example, adding audio to CASI shows no consistent differences in responses to sensitive questions (Couper, Singer, & Tourangeau, 2003) but may be an advantage with respondents with low literacy rates. Two randomized trials show no differences between ACASI and CATI in reported cancer screening behaviors (Clark, Rogers, Armstrong, Rakowski, & Kviz, 2008) or risky sex behaviors (Ellen et al., 2002). However, a randomized trial showed that response rates to sensitive questions were somewhat higher but interview completion rates lower with T-ACASI compared to CATI (Couper, Singer, & Tourangeau, 2004).

Conclusion

Given its multiple advantages, computer-assisted interviews have become increasingly common in research and should be considered for use in quality of life research. With the healthcare field moving towards the use of electronic medical records, computer-assisted interviews will probably become more common in healthcare settings as well. Advances in technology offer an array of choices for conducting computer-assisted interviews. The small differences in results between technologies allow respondents or patients to choose their preferred method of interview and give clinicians and researchers flexibility in choosing a mode or mix of modes for data collection.

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Computer-Assisted Self-Interviews (CASI)

► Computer-Assisted Interviews, Quality of Life

Computer-Assisted Telephone Interviews (CATI)

► Computer-Assisted Interviews, Quality of Life

Conceptions of Progress

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Definition

Conceptions of ► progress are theorized conceptualizations of progress. Each conception is comprised of an approach, a fundamental attitude toward progress (Optimistic or Skeptic), and a theory of progress, a choice regarding the content of progress (Liberal, Social-Liberal, Green, Conservative).

Description

Defining progress requires reflecting on different aspects of progress: both in terms of fundamental attitudes toward progress and the choices regarding its content. These two elements comprise the conceptions of progress. Within current conceptions of progress, two general attitudes (hereby: "fundamental approaches") to progress can be identified, as well as four current theories of progress, describing its content – the relationship of progress to other values.

Approaches to Progress

The two fundamental approaches to progress are optimism and skepticism, which stand at the heart of every debate about progress, even prior to the Enlightenment (resembling in many ways the debate between progressivists and declinists – Nisbet, 1980). The disagreement regarding progress focuses on whether human beings should or should not strive for progress and human improvement.

On the one hand, skeptics – opponents of progress – see an aspiration for social progress as dangerous, since it seeks human perfection (Passmore, 1970). Human perfection, they claim, cannot be achieved, and aspiring to it can

be very costly. Indeed, it is this aspiration that can lead to totalitarian regimes and genocide. Those holding the skeptic approach believe that society should not try to achieve or direct progress; doing so hurts those in society who do not share the same view of progress, and it can incur other substantial costs, such as encouraging growth beyond the earth's resources.

On the other hand, the optimistic proponents of progress believe that striving for progress keeps the world from chaos and allows conditions to improve. It is the aspiration to progress that drives humanity to great achievements in all fields of life. They maintain that without aspiring for progress, there can only be change for change's sake, with no actual improvement.

Within these two fundamental approaches, the optimistic and the skeptic, four contemporary theories (or more accurately, four families of theories, since each theory encompass more than one coherent theory) can be identified.

Theories of Progress

The Liberal Theory of Progress: This theory relies heavily on economic indicators to measure progress and refers to economic growth as both the generator of progress and as the essence of what progress is. With the major technological discoveries of the last century, and the growing dominance of the free market system, economic growth (as measured by gross domestic product, ▶ GDP) became widely accepted as the indicator for progress of societies. Within the fields of ▶ progress, ▶ development, and ▶ quality of life, it is the dominant theory of progress today (Thomas et al., 2000). Drawing from the Liberal theory, which highlights neutrality and rights, this mainstream economic theory is used to both define and to pursue progress. It perceives the free market as generating progress in all areas of life, and it grew more popular as it became evident that economic growth does indeed bring with it an increase in human well-being: a correlation is found between growth in GDP and other aspects of human life such as life expectancy at birth, ▶ health, and ▶ social cohesion (Boarini, Johansson, & D'Ercole, 2006).

However, this theory is controversial both in its demand for a particular form of capitalism and in the costs this model of progress incurs, primarily costs in environmental and social terms. Over the years, it became clear that not only was GDP growth not intended to measure progress but it also provides a very partial picture of progress. For example, GDP fails to take into account transactions that are not money based – activities that are largely agreed upon as central to human life but are unpaid (such as family life, housework, and clean air to breath). Similarly, GDP growth does not take into account environmental damage or social costs and, on the other hand, is positively influenced by what we consider as regression, such as growth in ▶ crime (producing expenses that translate to higher GDP yet to lower quality of life). Indeed, in many countries around the world, environmental indicators have been added to national accounts of well-being and are also measured; these include greenhouse emissions, carbon footprints, and ▶ social indicators such as enrollment in education. Nevertheless, for many reasons – perhaps misconceptions or perhaps for want of a convenient alternative – GDP remains the main indicator in the literature and in politics, when regarding progress, and GDP growth remains the primary goal of many of the world's policymakers.

The Social Liberal Theory of Progress: In general, this theory perceives progress as a concept in which the social dimensions should be emphasized. Its different representatives (e.g., Sen, 1999) might equate progress with an increase in social ▶ capabilities. Other alternatives include relief of poverty or other notions of social justice (such as other forms of social agenda, e.g., Wolff & de-Shalit, 2007). This theory puts greater emphasis on ▶ social indicators – rather than economic indicators – to measure progress. Another field of research contributing greatly to this theory is the work on "quality of life," aimed at exploring and improving people's quality of life and well-being. See the works of Michalos on this subject (for instance, Michalos, 2003). These works are sometimes being put into practice in

policymaking through national and community participatory projects, involving citizens in defining what they perceive as progress and quality of life.

The Green Theory of Progress: This theory regards progress as being necessarily in tune with the earth, introducing notions of sustainability that emphasize the problems of limited resources and the interests of future generations. There are two main views of progress within the Green theory. One which is the environmental view (or the "soft" view) works within mainstream political systems and presses for environmental costs to be more fully taken into account when considering progress. The other, which is the ecological view (or the "radical" view), maintains that the search for growth and progress has been very costly. This view stresses the need for a methodological shift in the way history and progress are perceived: focusing on "progress" prevents us from seeing the costs it involves and moves us away from the ▶ good life in itself.

The Conservative Theory of Progress: This theory opposes the pursuit of progress in the social sphere. It perceives progress as possible within the technological and scientific spheres alone. This theory does not regard knowledge in the social sphere as cumulative, and consequently, it suggests that political and social ideas should not aspire to "progress." Primarily, most Conservatives regard changes in the social sphere with suspicion. Moreover, they perceive human attempts to achieve progress in the social sphere as not only damaging social structures and family values but also as the cause for all major atrocities in history. In a way, this is a variation on the political philosophy of Edmund Burke: "Hume and Burke. . .loyal critics who would accept much of what Enlightenment came to stand for but see themselves as putting a healthy brake on some of the wilder claims that the age of Reason made for itself" (McClelland, 1996, p. 404). For more recent Conservative views, see John Gray's works (Gray, 2006). According to the contemporary conservative view, the political sphere should deal with current affairs without aspiring to progress, which can only occur in the natural sciences and technology.

Different Conceptions of Progress

These four theories of progress fit into the two fundamental approaches to progress, composing different conceptions of progress. The Liberal and the Social Liberal theories are part of the optimistic approach to progress. Both theories, though emphasizing different goals and means for progress, hold an optimistic approach, which assumes the possibility of planned progress leading to social and personal improvement. The Liberal theory, combined with the optimistic approach, is perceived in the literature today as the primary component of the mainstream conception of progress. Both the Green and the Conservative theories are included in the skeptical approach to progress. Although they differ in many ways, these two theories regard the possibility of human-planned progress as highly unlikely and very dangerous. While Conservatives fear hubris and the implications of "trying to play God," regarding this danger as a threat to humans, the Green point of view holds progress as dangerous mostly to the planet and other species and perceives the attempt to control all aspects of life as hubris toward nature. These conceptions of progress are regarded as alternative conceptions of progress.

Nonetheless, the mainstream conception of progress in the late twentieth century and early twenty-first century, comprised of the optimistic approach to progress and the Liberal theory of progress, is slowly changing. This change is evident through a series of works on the subject (Itay, 2009; Stiglitz et al., 2009 and more) as well as official policies around the world taking a turn toward both the Social Liberal theory and the Green theory of progress. Thus, a new conception of progress is being formed – one that is still optimistic in approach yet with skeptical influences and Green and Social Liberal in its theory of progress.

Conceptions of progress change over time, as evident nowadays, yet they maintain the structure of an approach and a theory comprising them. These two elements offer a general attitude toward progress as well as actual content for progress.

Cross-References

- ▶ Development
- ▶ GDP Growth
- ▶ Liberalism

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Conceptual Design of Indicators

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Definition

It concerns the conceptual approach aimed at constructing quality of life indicators.

Description

Quality of life represents a multidimensional concept, complex to be defined. The main notion that should be considered in order to measure quality of life in a quantitative perspective and through statistical indicators is complexity, which comes from the reality to be observed and affects the process of measurement. Actually, the process of measurement requires:

- A robust conceptual definition
- A consistent collection of observations
- A consequent analysis of the relationship between observations and defined concepts

What relates concepts to reality is represented by indicators.

The conceptual design of indicators should be developed (1) through a *hierarchical design* (Lazarsfeld, 1958) and (2) by defining the adequate *model of measurement*.

This conceptual design aimed at developing indicators that are able to (1) represent different aspects of the reality, (2) picture the reality in an interpretable way, and (3) allow meaningful stories to be told.

Hierarchical Design

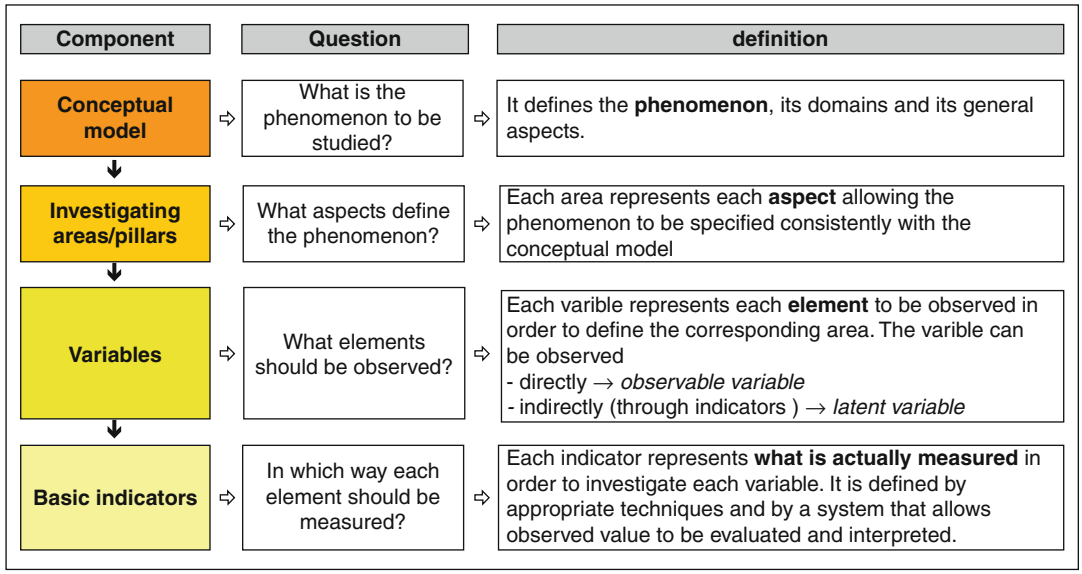
The hierarchical design (Fig. 1) requires the definition of the following components:

Conceptual Model

The definition of the quality of life conceptual model represents a process of abstraction, a complex stage that requires the identification and definition of theoretical constructs. The conceptual model varies according to (1) the researchers' point of view, (2) the objectives of the observation, (3) the applicability of the concepts, and (4) the sociocultural, geographical, and historical context.

Areas

The areas (in some cases named "pillars") define in general terms the different aspects that allow quality of life to be clarified and specified consistently with the conceptual model. Their definition may concern and involve concepts like health, education, well-being, income, production, trade, etc.



Conceptual Design of Indicators, Fig. 1 The hierarchical design

Latent Variables

Each variable represents one of the aspects to be observed and confers an explanatory relevance onto the corresponding defined area. The identification of the latent variable is founded on theoretical assumptions (e.g., homogeneity, dimensionality) and empirical statements so that the defined variable can reflect the nature of the considered phenomenon consistently with the conceptual model. However, even if we are able to identify a variety of diverse variables, we have to accept the idea that may be no set of variables can perfectly capture the concept to be measured (e.g., social or economic well-being; Sharpe & Salzman, 2004).

Basic Indicators

Each basic indicator (item, in subjective measurement) represents what can be actually measured in order to investigate the corresponding variable. Each observed element represents an indirect measure (**indicator**) of the reference variable (De Vellis, 1991). The hierarchical process allows a meaningful and precise position to be attributed to each indicator. In other words, each indicator represents a distinct component of the phenomenon within the hierarchical design and takes on and gains its own meaning. Consequently, it can be properly interpreted because of its position inside the hierarchical structure.

According to a simple and weak strategy, each latent variable is defined by a single element (*single indicator approach*/*single item approach*). However, complex latent variables require the definition of several basic indicators (► multi-indicator measures).

Observed Variables

Some variables can be observed and directly measured. Consequently, they do not need any indicator (age, sex, level of education, and so on).

The hierarchical design can be drawn also through sub-designs (e.g., each area could require subareas) and its logic can be applied both at micro and macro level (e.g., questionnaire construction).

Model of Measurement

The model of measurement concerns the conceptual relationship between each indicator and the corresponding variable. It can be conceived

through two different approaches (Blalock, 1964; Diamantopoulos & Siguaw, 2006):

Reflective Model (*Top-Down* Conceptual Approach)

In this case, latent variable is measured by indicators assumed to be *reflective* in nature. In other words, the indicators are seen as functions of the latent variable, whereby changes in the latent variable are reflected (i.e., manifested) in changes in the observable indicators.

The reflective approach assumes that (Diamantopoulos & Winklhofer, 2001):

- Indicators are interchangeable (the removal of an indicator does not change the essential nature of the underlying construct).
- Correlations between indicators are explained by the measurement model.
- Internal consistency is of fundamental importance: Two uncorrelated indicators cannot measure the same construct.
- Each indicator has error term.
- The measurement model can be estimated only if it is placed within a larger model that incorporates effects of the latent variable.

Formative Model (*Bottom-Up* Conceptual Approach)

The indicators are assumed to be *formative* (or causal) in nature when are viewed as causing – rather than being caused by – the latent variable. Changes in formative indicators (Blalock, 1964), determine changes in the value of the latent variable.

In the formative approach, a concept is assumed to be defined by (or to be a function of) a group of indicators, identified in order to define it. In other words, the measures are formative when the latent variable is defined as a linear sum of indicators.

The main specific properties of the formative indicators can be synthesized as follows (Diamantopoulos & Winklhofer, 2001):

- The indicators are not interchangeable (omitting an indicator is omitting a part of the construct).
- The correlations between indicators are not explained by the measurement model.
- There is no reason that a specific pattern of signs (i.e., positive vs. negative) or magnitude (i.e., high vs. moderate vs. low), in other words, internal consistency is of minimal importance: Two uncorrelated indicators can both serve as meaningful indicators of the construct.
- Indicators do not have error terms; error variance is represented only in the disturbance terms.

An example is socioeconomic status (SES), where indicators such as education, income, and occupational prestige are items that cause or form the latent variable SES. If an individual loses his or her job, the SES would be negatively affected. However, saying that a negative change has occurred in an individual's SES does not imply that there was a job loss. Furthermore, a change in an indicator (say income) does not necessarily imply a similar directional change for the other indicators (say education or occupational prestige).

The correct distinction between formative and reflective indicators allows the correct:

- Assignment of meaning to the relationships and consequently to the conceptual model
- Identification of the procedure aimed at aggregating basic indicators

In particular, the aggregating procedure has to take into account the main specific properties of the selected indicators.

In choosing the correct measurement approach, four different situations can be theoretically identified (Diamantopoulos & Siguaw, 2006) as represented in the following Table 1:

Conceptual Design of Indicators, Table 1 Measurement approaches: correctness/incorrectness of the assumption

		'Correct' theory	
		reflective	formative
Chosen perspective	reflective	*correct decision*	**Type I error**
	formative	**Type II error**	*correct decision*

A wrong assumption of the perspective produces two types of error:

- Type I occurs when a reflective approach has been adopted although a formative approach would have been theoretically appropriate for the construct.
- Type II occurs when a formative approach has been adopted even if the nature of the construct requires a reflective operationalization (a synthetic indicator construction procedure is adopted in place of a scaling model). This error can lead to identification problems.

Cross-References

► Indicator Development and Construction
► Multi-indicator Measures

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Conceptual Framework for Quality of Life

► Systemic Quality of Life Model (SQOL)

Conceptualizing Democracy and Nondemocracy

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Synonyms

Autocracy; Common good; Electoral democracy; Guided democracy; Liberal democracy; Minimalist democracy; Neo-democracy; Organic democracy; People's democracies; Polyarchy; Popular rule; Presidential democracy; Procedural democracy; Representative government; Selective democracy; Substantive democracy

Definition

Democracy is a synthesis of the Greek words *demos*, meaning people, and *kratos*, meaning to rule – that is, "rule by the people." The more precise definition of the term has always been disputed; democracy has even been highlighted as the essentially contested concept *par excellence*. It is therefore necessary to distinguish between different definitions of democracy. One way of doing so is by creating a typology which includes multiple types of democracy. Such a systematic conceptual distinction paves the way for assessing the relationship between democracy and other phenomena such as ► equality, ► economic growth, peace, and famine.

Description

The desire for basic material goods ("a good coat, a good roof, and a good dinner") is what makes the masses fight for democracy according to Acemoglu & Robinson (2006): 20. However, whether democracy does indeed facilitate

a more equal distribution of goods in society is disputed (Przeworski, 2007; cf. Sirowy & Inkeles, 1990). So is whether democracy promotes economic growth (Gerring, Bond, Barndt, & Moreno, 2005; Olson, 1993; Sirowy & Inkeles, 1990). We are on firmer ground with respect to the so-called democratic peace (Russett, 2000) – the assertion that democracies do not fight each other – and with respect to the relationship between democracy and the prevention of famines (Sen, 1999), but even these relationships have been questioned (Mansfield & Snyder, 2005; Rubin, 2009). Indeed, a teeming literature emphasizes the potential detrimental effects of democratic openings under nondemocratic regimes. For instance, openings have been held to feed conflict, both internally and externally (Hegre, Ellingsen, Gleditsch, & Gates, 2001; Mansfield & Snyder, 2005), and to produce regimes particularly liable to exhibit state repression (Regan & Henderson, 2002). Finally, whereas some studies have shown that democracy has a positive effect on people's own evaluation of their ▶ quality of life and ▶ happiness (Frey & Stutzer, 2000; Inglehart, Foa, Peterson, & Welzel, 2008), others find no such relationship (Veenhoven, 2000).

These disagreements regarding the causal effects of democracy should not disguise an important point of consensus: If democracy is conceptualized in a relatively maximalist sense – say, by including the rule of law – a clear covariation exists between this regime form and ▶ affluence, peace, and ▶ security. Liberal democracies, as such regimes are normally termed, are simply wealthier, more internally secure, more peaceful in their relationships with other democracies, and more socioeconomically equal. However, the rampant debates – and the conflicting empirical findings – show that we need to distinguish between different definitions of democracy if we are to assess the causal relationship between democracy and various aspects of the quality of life.

Creating a typology that encompasses different definitions of democracy (and, *ipso facto*, of nondemocracy) is also necessary for an additional reason, viz., that the definition of democracy is hugely contested in the literature. Walter Bryce Gallie (1956) famously referred to democracy as an essentially contested concept – that is, a concept which is characterized by disagreement regarding the fundamental meaning because it is multidimensional, abstract, qualitative, internally complex, and evaluative.

The History of the Term and Its Meaning

The contested nature of democracy is reflected in the history of the term and the concept. The meaning of democracy has changed since its conception in classical Greece (Dunn, 2005; Naess, Christophersen, & Kvalo, 1956). The democracy (*demokratia*) of the Greeks was a direct democracy in which magistrates were normally selected using lot (Hansen, 1991; Manin, 1997). To its defenders, such a direct democracy was the preserve of both ▶ liberty and equality. However, foes of democracy, such as ▶ Plato and ▶ Aristotle, tended to understand democracy as the "rule of the poor." Their observation was that the enfranchised poor would use their political power to proscribe the more affluent minority; the historian Polybius even described such pure democracy as mob rule (*ochlokratia*). Nondemocracy was thereby rendered either as the other two pure regime forms included in Aristotle's classical typology, rule by a single person (*basileia*/*tyrannis*) or rule by the few (*aristokratia*/*oligarchia*), or as the mixed constitutions where elements of all three types coalesced (Hansen, 2010).

The writings of Plato, Aristotle, and Polybius were to be so influential that democracy, in its pure form, was ubiquitously treated as a derogatory term throughout the Middle Ages. Only when democracy was one out of three elements in a mixed constitution – each element tempering the others – was it sometimes seen as praiseworthy. Tellingly, we find virtually no self-professed democrats in the period from the disappearance of Greek democracy during the Roman Empire to the American War of

Independence (Naess et al., 1956). Instead, democracy was construed as the rule of the poor. This occurred as late as the American Revolution, most notoriously by James Madison in the Federalist Papers, but we also meet this understanding among many of the other founding fathers. Only in the nineteenth century did democracy again become an object of praise. But when democracy made its reappearance – both as regime form and as an ideology – it was in the guise of representative democracy, not direct democracy (Manin, 1997). In other words, democracy had now largely altered meaning. Lot was replaced by elections of representatives, the political unit was enlarged from city states to national states, and constitutionalist safeguards made for a fusion of political liberalism and democracy.

After the Second World War, democracy has become honorific in the sense that virtually any political grouping has proclaimed itself democratic. Some of these were clearly not so, and neither were the states which they sometimes controlled. Samuel E. Finer (1962) lists the "people's democracies" of Central and Eastern Europe, Nasser's "presidential democracy" in Egypt, Sukarno's "guided democracy" in Indonesia, Franco's "organic democracy" in Spain, Stroessner's "selective democracy" in Paraguay, and Trujillo's "neo-democracy" in the Dominican Republic as examples of such political misuse of the term.

No intellectual consensus about the definition existed either. A great public and academic debate on the meaning of democracy occurred in the aftermath of World War II (e.g., Schumpeter, 1974[1942]; Tingsten, 1965 [1945]). What sparked this debate was basically that democracy was defined in very different ways by different people, all of whom proclaimed the mantle of democracy. Some maintained a purely procedural definition, solely stressing the "competitive struggle for people's vote" (Schumpeter, 1974[1942]: 269). Others identified democracy with the common good. Finally, many socialists construed it as social equality; in the extreme case of Marxist-Leninists, it was even defined as the dictatorship of the proletariat. Obviously, depending on which definition of democracy was used, nondemocracy would take on very different meanings.

An Overview of Contemporary Definitions

Many have decried this lack of consensus (Orwell, 1946; Held, 2006). Fortunately, we can bring order into the seeming chaos by viewing the definitional disputes from a higher ground. If we are to understand the present disagreements regarding the definition of democracy, the most general distinction we need to make is that between "procedural" and "substantive" definitions of democracy (Collier & Levitsky, 1997). The procedural definitions see democracy as a method of access to political power, which is often augmented by certain liberal rights (such as freedom of speech) that set limits on the extent to which state repression of citizens can occur. This take on democracy is also called the "realistic" approach because it does not include criteria which make democracy an unachievable ideal. Substantive definitions, on the other hand, are normally rather demanding because they direct attention to the substance of political decisions. Included as defining attributes of democracy here are criteria such as a relatively equal distribution of resources or decision-making based on rational deliberation (Held, 2006: 1–2).

Procedural and substantive definitions thus differ fundamentally. Whereas one category targets institutional characteristics, particularly pertaining to elections, the other focuses the more general principles of democracy. Via on his distinct notions of (ideal) democracy and polyarchy, Robert A. Dahl (1989) has delivered a carefully justified anchorage for the understanding of democracy, which illustrates this. Based on the premises that all interests must be weighted equally and that all adults are generally sufficiently qualified to participate in the making of binding, collective decisions that have an impact in their interests, he establishes five criteria for the ideal democratic process (Dahl, 1989: 105–131):

- *Effective participation*. Throughout the process of making binding decisions, citizens

ought to have an adequate opportunity, and an equal opportunity, for expressing their preferences as to the final outcome. They must have adequate and equal opportunities for placing questions on the agenda and for expressing reasons for endorsing one outcome rather than another.

- *Voting equality at the decisive stage*. At the decisive stage of collective decisions, each citizen must be ensured an equal opportunity to express a choice that will be counted as equal in weight to the choice expressed by any other citizen. In determining outcomes at the decisive stage, these choices, and only these choices, must be taken into account.
- *Enlightened understanding*. Each citizen ought to have adequate and equal opportunities for discovering and validating (within the time permitted by the need for a decision) the choice on the matter to be decided that would best serve the citizen's interests.
- *Control of the agenda*. The demos must have the exclusive opportunity to decide how matters are to be placed on the agenda of matters that are to be decided by means of the democratic process.
- *Inclusiveness*. The demos must include all adult members of the association except transients and persons proved to be mentally defective.

This understanding of democracy cannot be accommodated within the procedural/realistic tradition. But Dahl also delivers what is a pure specimen of such a procedural definition. Dahl thus acknowledges that a full democracy – based on the process criteria listed above – is unlikely to be achieved completely; the criteria represent an ideal measure for assessing reality. He instead points to a number of specific procedures that are necessary for a modern representative democracy, using the term *polyarchy* to designate countries that fulfill these criteria. To Dahl (1989): 222, "all the institutions of polyarchy are necessary to the highest feasible attainment of the democratic process." However, that "is not to say that they are sufficient." The polyarchy criteria are the following:

- *Elected officials*. Control over government decisions about policy is constitutionally vested in elected officials.
- *Free and fair elections*. Elected officials are chosen in the frequent and fairly conducted elections in which coercion is comparatively uncommon.
- *Inclusive suffrage*. Practically, all adults have the right to vote in the election of officials.
- *Right to run for office*. Practically, all adults have the right to run for elective offices in the government, though age limits may be higher for holding office than for the suffrage.
- *Freedom of expression*. Citizens have a right to express themselves without the danger of severe punishment on political matters broadly defined, including criticism of officials, the government, the regime, the socioeconomic order, and the prevailing ideology.
- *Alternative information*. Citizens have a right to seek out alternative sources of information. Moreover, alternative sources of information exist and are protected by laws.
- *Associational autonomy*. To achieve their various rights, including those listed above, citizens also have a right to form relatively independent associations or organizations, including independent political parties and interest groups.

At this point, it is worthwhile to recall that democracy is an essentially contested concept. It therefore makes little sense to declare either procedural or substantive definitions the "true" understanding of democracy. Which alternative is more useful basically depends on the purpose of invoking the concept or, more particularly, the research question scholars pose. This premise brings us quite some distance toward opting for one strand of definition over the other. If our objective is to measure democracy in a plurality of countries and/or to assess the relationship between democracy and quality of life factors, procedural definitions have a competitive edge. As various scholars have argued, such definitions are, first, amenable to measurement and, second, do not include substantive elements by definition (Diamond, 1999:

8), two things which facilitate untangling the empirical relationships between democracy and its potential causes and consequences, including a number of quality of life indicators. As both tasks are important, it makes sense to proceed by laying bare the variation within the procedural tradition.

A Typology of Democracy and Nondemocracy

The most systematic way to represent this variation is by distinguishing systematically between thinner (minimalist) and thicker (maximalist) conceptions within the procedural/realistic tradition of defining democracy. The objective of such an exercise is, first, to encircle the most important such definitions and, second, to show how they relate to each other in terms of the defining attributes. In an attempt to do so, Møller and Skaaning (2011) flesh out four types of democracy:

- *Minimalist democracy* defined by the presence of meaningful competition for political leadership via elections characterized by repeatability, uncertainty, and irreversibility of the outcomes (e.g., Przeworski, Alvarez, Cheibub, & Limongi, 2000; Schumpeter, 1974[1942]: 16–18).
- *Electoral democracy* defined by the presence of meaningful competition for political leadership characterized by inclusive and flawless elections (e.g., Diamond, 1999).
- *Polyarchy* defined by the presence of meaningful competition for political leadership by inclusive and flawless elections combined with full respect for freedom of speech and association (e.g., Dahl, 1989).
- *Liberal democracy* defined by the presence of meaningful competition for political leadership by inclusive and flawless elections combined with full respect for freedom of speech and association and the rule of law (e.g., O'Donnell, 2010; Diamond, 1999).

As the description of the types indicates, a simple hierarchical relationship exists across these four definitions, meaning that they can be placed along different rungs of the ladder of generality (Sartori, 1970). To exemplify, all polyarchies are also electoral democracies and minimalist democracies (but not all of them are liberal democracies). In this way, the defining thicker types subsume their thinner equivalents, as illustrated in Table 1.

Conceptualizing Democracy and Nondemocracy, Table 1 A typology of democratic political regimes

	Competitive elections	Free, inclusive elections	Political liberties	Rule of law
Minimalist democracy	+			
Electoral democracy	+	+		
Polyarchy	+	+	+	
Liberal democracy	+	+	+	+

Note: The presence of a criterion is indicated by "+"

Each of these four types carves out not only different stretches of democracy but also different stretches of nondemocracy; the thicker the definition, the more empirical instances will be grouped as nondemocracies. More generally, nondemocracy is best rendered as *autocracy*, a term that "stands as an undisputed and hardly disputable good opposite of democracy" (Sartori, 1987: 205). Just as democracy, this overarching concept can be further subdivided into types such as closed authoritarianism, hegemonic authoritarianism, and electoral authoritarianism (e.g., Diamond, 2002; Levitsky & Way, 2010).

Discussion

The typology presented in Table 1 is an attempt to capture the most important procedural definitions of democracy using a hierarchical logic where defining attributes are individually necessary and mutually sufficient. Some have instead proposed a radial logic where diminished subtypes are separated out from a primary category by identifying the attribute which these diminished subtypes lack (Collier & Levitsky, 1997). To relate this to Table 1, the primary category would be liberal democracy and various diminished subtypes could be created by, in turn,

removing one of the defining attributes (say, political liberties) while maintaining the others. However, it has been demonstrated that we find few empirical instances of such diminished subtypes (Møller & Skaaning, 2011). Also, conceptually, at least one such subtype – the one lacking competitive elections – makes little sense as an instance of democracy. Not only are such conceptual and empirical problems avoided when employing a hierarchical typology. The distinction between minimalist democracy, electoral democracy, polyarchy, and liberal democracy also paves the way for theorizing and analyzing if the empirical relationships are different when more minimalist and more maximalist definitions of democracy, respectively, are used.

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Concerns

- ▶ Anxiety
- ▶ Worries (Global Measure)

Concerts

- ▶ Arts in British Columbia, Canada

Concurrent Validity

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Definition

Concurrent validity is one approach of ▶ criterion validity that estimates individual performance on different tests at approximately the same time.

Description

Concurrent validity and ▶ predictive validity are two approaches of ▶ criterion validity. ▶ Criterion validity describes how a test effectively estimates an examinee's performance on some outcome measure(s). The outcome measure, called a criterion, is the main variable of interest in the analysis. The test scores are truly useful if they can provide a basis for precise prediction of some criteria. Concurrent validity is similar to ▶ predictive validity, as both of them are commonly interpreted as correlations between a test and the relevant criteria. Concurrent validity and ▶ predictive validity are only different in the time that the two tests are measured (McIntire & Miller, 2005).

In concurrent validity, the test scores and the criterion scores are taken simultaneously to demonstrate the extent that test scores correctly estimate an individual's present condition on the relevant measure. The two measures may be assessed on the same or related constructs. Concurrent validity is usually measured by the correlation between a new test and an existing test to demonstrate whether the new test correlates well with the existing test (Murphy & Davidshofer, 1998). Therefore, the resulting correlation is a concurrent validity coefficient. For example, a mathematics course may be replaced with using a successful score on an arithmetic achievement test which possesses concurrent validity. In other words, students would be permitted to pass a test in place of taking a course if the test scores could be used to accurately predict the current performance of students in the course. To determine concurrent validity, students completing a mathematics course take an arithmetic achievement test. The arithmetic achievement test is acceptable for use if there is a strong connection between the grades of the arithmetic achievement test and the mathematics course (Gregory, 2000).

▶ Quality of life research supplies some example of concurrent validity. One example is the concurrent validity of a brief self-report measure of ▶ quality of life, the Satisfaction with Life Domains Scale for Cancer (SLDS-C), being verified by its score correlation of 0.76 with another cancer-specific ▶ quality of life measure, the ▶ Functional Assessment of Cancer ▶ Therapy Scale-General (FACT-G). Correlations of the SLDS-C score with the subscales of the FACT-G, including functional well-being ($r = 0.72$), emotional well-being ($r = 0.62$), and physical well-being ($r = 0.61$) are also relevant. According to this result, those who have higher life satisfaction are predicted to express more ▶ positive affect and have higher levels of health status (Baker et al., 2007).

Another relevant example of concurrent validity was tested by collecting the scores of the Quality of Life Systemic Inventory (QLSI) which measures the goal attainment of some workers who are on sick leave because of musculoskeletal disorders (MSDs). The correlations of the scores with perception of ▶ disability (Roland-Morris Disability Questionnaire), ▶ health-related quality of life (▶ SF-12), ▶ stress (psychological stress measure), and

▶ distress (psychological distress index) were investigated. The result showed there are significant correlations between QLSI scores and ▶ distress, ▶ health-related quality of life, and perception of ▶ disability (Coutu, Durand, Loisel, Dupuis, & Gervais, 2005).

Cross-References

- ▶ Criterion Validity
- ▶ Disability
- ▶ Distress
- ▶ Functional Assessment of Cancer Therapy (FACT)
- ▶ Health-Related Quality of Life (HRQOL)
- ▶ Positive Affect
- ▶ Predictive Validity
- ▶ Quality of Life
- ▶ Short Form 12 Health Survey (SF-12)
- ▶ Stress

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Concussion

▶ Traumatic Brain Injury

Conditional Cooperation and WTP

▶ Willingness to Pay for Private Environmental Goods

Condition-Specific Measure

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Synonyms

Condition-specific questionnaire; Disease-specific measure; Disease-specific questionnaire; Patient-reported outcome measure

Definition

Condition-specific measures are either clinical measures or experiential measures. They are health-status questionnaires that are designed for specific diagnostic groups or patient populations. Their advantage is that they measure aspects that are particularly salient to a specific condition or patient group. Clinical measures assess signs, symptoms, and tests, whereas experiential measures are a type of ▶ patient-reported outcome measure that assess a range of dimensions of ▶ health-related quality of life such as physical functioning, mental functioning, and social functioning.

Description

Condition-specific measures exist for an increasingly large variety of conditions. Two types of condition-specific measures have been described: (1) clinical measures which primarily assess signs, symptoms, and tests and (2) experiential measures, which capture the impact of a condition on the person affected by the

condition (Atherly, 2006). The measures can either be completed by clinicians who rate patients' outcome or health status or by patients themselves. The measures described in this entry are self-completed experiential measures, that is, patient-reported outcome measures (PROMs) which are completed by patients themselves.

The term "condition-specific measure" tends to be used interchangeably with the term "disease-related measure." However, Patrick and Deyo (1989) make a distinction between "condition" and "disease" specific, as not all conditions are diseases (e.g., back pain is a condition but not a disease, whereas Parkinson's disease can be referred to as either a condition or a disease). Even when this distinction is taken into consideration, the features of condition-specific and disease-specific measures are broadly the same. Some examples of condition-specific measures include the Aberdeen Back Pain Scale (ABPS) (Ruta, Garratt, Wardlaw, & Russell, 1994), the ▶ Asthma Quality of Life Questionnaire (AQLQ), and the ▶ Parkinson's Disease Questionnaire (PDQ).

Condition-specific measures assess a specific diagnostic group or patient population, often with the goal of measuring responsiveness or "clinically important" changes (Patrick & Deyo, 1989). An advantage of condition-specific measures is that they are specifically designed to assess aspects that are particularly salient to a specific patient group. Therefore, they should be less likely to display a floor or ▶ ceiling effect (Atherly, 2006) and more likely to be sensitive to change (Jenkinson & McGee, 1998). A systematic review of 43 randomized controlled trials (Wiebe, Guyatt, Weaver, Matijevic, & Sidwell, 2003) found that, in general, disease-specific measures are more responsive than generic measures where a therapeutic effect was found, although the responsiveness of measures may vary according to the context in which they are used.

A disadvantage of condition-specific measures is they cannot be administered to people without the condition, and therefore, comparisons cannot be made with other patient groups or population norms (Fitzpatrick, Davey, Buxton, & Jones, 1998; Jenkinson & McGee, 1998). Furthermore, condition-specific measures would be unlikely to capture unanticipated aspects of a condition (Fitzpatrick et al., 1998). These limitations can be addressed by generic measures which can be used in different population or patient groups. Condition-specific measures are meant to complement, not replace, generic measures, and the two types of measure are often used in combination.

Condition-specific measures can be used in a number of ways, including, as endpoints in clinical trials, to assess the health care needs of populations and to assist health care professionals in the provision of individual patient care (Fitzpatrick et al., 1998). In clinical practice, for example, condition-specific measures can be used to screen patients for health problems, to identify patients suitable for a given treatment, and to monitor the progress of a patient's health condition. It is important to note that measures developed and validated for one purpose cannot, necessarily, be automatically transferred and used for another purpose (Fitzpatrick et al.).

The development of a condition-specific measure typically involves the generation of items, reducing the number of items and pretesting and validating the measure. Ideally, items are generated by qualitative interviews with patients who have the condition, but items are also generated from the literature (Jenkinson & McGee, 1998). Items are reduced by selecting those that are the most commonly cited or that are rated as the most important by patients, and through the application of statistical methods (Guyatt, Bombardier, & Tugwell, 1986; Jenkinson & McGee, 1998). Guyatt et al. (1986) describe a "Rolls-Royce" and a "Volkswagen" model for developing instruments, where the "Rolls-Royce" model involves more in-depth steps at each stage (such as using qualitative interviews with patients for item generation, as opposed to generating items from

a review of existing instruments only) and larger (random) sample sizes than the "Volkswagen" model.

Condition-specific measures typically assess different dimensions of (health-related) quality of life including physical function, symptoms, global judgements of health, psychological well-being, social well-being, cognitive functioning, role activities, personal constructs, and satisfaction with care (Fitzpatrick et al., 1998). They may provide a profile of scores for each of the dimensions measured and/or a single overall score (index score) (Jenkinson & McGee, 1998). Grouping items into dimensions or an overall score has to be justified by presenting evidence of appropriate measurement properties (such as validity, ▶ reliability, responsiveness, and feasibility). Calculating the dimension scores can be as simple as summing the scores for each item within a dimension (e.g., AQLQ) or may involve transforming the raw (i.e., summed) score onto a scale from 0 to 100 (e.g., PDQ-39). Mostly, dimension scores cannot be calculated when items within the dimension are missing, although sometimes instructions exist on calculating scores when a small number of items are missing. Data imputation methods can be used to estimate the score of a missing item, thus allowing the dimension score to be calculated. There is, however, a general agreement that the best approach is to avoid missing data as much as possible.

The choice of which measure to use can be difficult as there are over 1,800 disease-specific (including population-specific) measures (Garratt, Schmidt, Mackintosh, & Fitzpatrick, 2002), and there can be more than one instrument for each condition. Choosing the appropriate measure is based on the research question, psychometric properties, and practical criteria (Atherly, 2006). The measure used should be able to answer the research question and cover the domains of interest. The measure needs to at least have been shown to be reliable, internally reliable, and valid, but other psychometric properties (feasibility, interpretability, acceptability, responsiveness) are also of importance (Fitzpatrick et al., 1998; Kane & Radosevich, 2011). The US Food and Drug Administration (FDA) (2009) has published guidelines for assessing the psychometric adequacy of PROMs. Practical aspects may include, for example, the method of administration or the length of the measure.

Cross-References

- ▶ Asthma Quality of Life Questionnaire
- ▶ Ceiling Effect
- ▶ Disease-Specific Measure
- ▶ Disease-Specific Questionnaire
- ▶ Floor Effect
- ▶ Health-Related Quality of Life
- ▶ Parkinson's Disease Questionnaire (PDQ-39)
- ▶ Patient-Reported Outcome Measure
- ▶ Randomized Clinical Trial
- ▶ Randomized Controlled Trial (RCT)
- ▶ Reliability
- ▶ Sensitivity to Change

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Condition-Specific Questionnaire

► Condition-Specific Measure
► Disease-Specific Questionnaire

Conduct Disorder

► Deviance

Conduct of Life

► Lifestyle(s)

Conference Board Consumer Confidence Index

► Consumer Confidence Index

Confidence

► Trust

Confidence in Government

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Synonyms

Governance; Government, quality of; Trust in government; Trust in institutions

Definition

In states where democratic elections exist, confidence in government to do what is right is a crucial variable to sustain human development and to improve people's ► quality of life. Confidence in government is closely related to the concept of trust in government and the legitimacy of their acts. Tyler (2006) has shown that people obey the law not only because they fear punishment but mainly because they trust in the law, institutions, and the national government. One of the critical dimensions to have confidence in government is the extent of administrative ► corruption that exists in the country. The quality of the delivery of public services is also an important variable.

Confidence in government is a complex and multidimensional concept that includes trust in police, trust in members of parliament or senate, trust in civil servants, the extent of administrative corruption in the country, the regulatory context, and the efficiency with which public services are provided. Confidence in government is closely related to the concept of social capital and good governance so that a decline in social capital may lead to a decline in confidence in government which in turn is a critical impediment for human development. Confidence in government is a variable that has been included in the World Values Survey (Inglehart et al., 1997, 2000) so that it allows cross-national comparisons of its effect on ► life satisfaction (Welzel & Inglehart, 2010).

Description

Confidence in government is a multidimensional variable that has been mainly studied in the political science, law, sociology, and social-psychological literatures. Studying its influence on life satisfaction (Diener, 2000) is only possible from a multidisciplinary perspective.

Based on the analysis of cross-national data coming from the World Values Survey (Inglehart & Welzel, 2009) and Gallup World Poll (National Institutions Index, which includes the variable of confidence in key institutions which are prominent to a nation's leadership, such as confidence in the national government and honesty in elections), Helliwell (2006) has reported that life satisfaction is driven to a considerable extent by the perceived quality of the social and institutional context in which people relate to each other, a concept that is closely linked with the idea and construct of social capital (Coleman, 1990; Putnam, 2000; Putnam, Leonardi, & Nanetti, 1993; Helliwell, 2003).

Continuing availability of life satisfaction data on an internationally comparable basis has allowed multilevel research to find cross-country differences in the confidence in government and its influence on life satisfaction. According to Helliwell (2006, p. 7), "international differences in life satisfaction by country reflect international differences in quality of life and they are meaningfully comparable among communities and nations." Therefore, indicators of life satisfaction become important indicators for the quality of public policy. One of the most important indicators in this sense is the confidence in government.

Various factors of the institutional context of a country influence the levels of individual life satisfaction. In particular, the level of social capital is an important variable to be considered. Social capital includes the idea of the quality of the relationships between people, a fact that is influenced by ▶ trust, ▶ social networks, and reciprocity. In turn these variables are a result of institutional factors, such as confidence in government.

One of the institutional variables that influence social capital is confidence in government. Individual assessments of general social trust and of confidence in government (confidence in police) are both strongly correlated with positive life assessments.

Additionally, individual life satisfaction has been shown to correlate with perceived corruption in government, so that an individual who thinks that corruption is widely spread in the government has a life satisfaction that is 0.2 points lower in a 0–10 scale. This effect is higher for transitional countries (Russia and Eastern Europe) and OECD countries and lower for Latin America and Africa (OECD, 2001), an effect that should be further researched. The quality of delivery of governmental services, a dimension of confidence in government, has also been shown to correlate positively with life satisfaction.

On the other hand, Tavits (2008) has shown that citizens with less ▶ corrupt governments enjoy higher levels of ▶ subjective well-being as compared to those in more corrupt countries. He used international data from 68 countries, as well as a survey for the 16 European democracies. This effect on subjective well-being can be higher as compared to the effect of income on SWB (Helliwell & Huang, 2008).

This is a promising venue for research that needs both conceptual and methodological advances in how to measure and compare confidence in government with life satisfaction measures.

Cross-References

▶ Trust

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Confidence in Institutions

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Synonyms

Institutional confidence; Institutional trust; Perceived institutional trustworthiness; Trust in institutions

Definition

Confidence in institutions is a multidimensional concept which generally refers to citizens' assessments or beliefs that several types of institutions such as political institutions, economic institutions, and social and cultural institutions, as well as their representatives, will at least do no harm to or at best serve public interests. Political institutions include national government, local government, political parties, the congress, judicial system and courts, police, and the military forces. Economic institutions refer to banks and financial institutions, major corporations, and organized labor. Social and cultural institutions include the education system, health-care or medical system, media, scientific community, and religious organizations. Confidence in political institutions is also called ▶ trust in political institutions, or political trust. Confidence in institutions is often classified into two broad categories, i.e., confidence in public institutions and private institutions, based on the nature of institutions.

Description

Measurement

Confidence in institutions has been widely surveyed in recent decades in the World Values Survey/European Values Survey, the Gallup World Poll, and various national social and barometer surveys. The type of institutions covered and the scale of answers to the survey questions may vary from one survey to another. The World Values Survey/European Values Survey, with a four-point scale, asks the following question: "Please look at this card and tell me, for each item, how much confidence you have in them. Is it a great deal (4), quite a lot (3), not very much (2) or none at all (1)? (a) the armed forces, (b) the courts, (c) the government (in your nation's capital), (d) parliament." The Gallup World Poll asks "Do you have confidence in each of the following, or not? (a) the military, (b) judicial system and courts,

(c) national government, (d) health care or medical systems, (e) financial institutions or banks, (f) religious organizations, (g) quality and integrity of the media, (h) honesty of elections." The European Social Survey asks "Using this card, please tell me on a score of 0–10 how much you personally trust each of the institutions I read out. Zero means you do not trust an institution at all, and 10 means you have complete trust. (a) parliament, (b) the legal system, (c) the police, (d) politicians, (e) political parties, (f) the European parliament, (g) the United Nations."

Declining Trend

Many studies show the declining trend of various dimensions of confidence in institutions in the United States (Alford, 2001; Bartolini, Bilancini, & Pugno, 2013; Miller, 1974; Pew Research Center, 2010; Stevenson & Wolfers, 2011). Stevenson and Wolfers (2011) exploit annual Gallup surveys to examine the trends of trust in Congress, the banks, big business, the Supreme Court, and newspapers in the United States. They find that confidence in institutions in general has declined in recent decades. Moreover, this decline has accelerated in recent years, particularly trust in Congress and trust in banks, following the 2008 financial crisis. The declining trend is also found in many other countries. For example, Newton and Norris (2000) find that confidence in all the public institutions examined has experienced a significant drop (but with different magnitude) using the data of 17 nations surveyed in the World Values Survey/European Values Survey. However, the trends across institutions in the nonprofit and private sectors are mixed: confidence in the church declines, trust in the education system remains stable, but confidence in major companies and the media slightly increases. This research may suggest that the problems of confidence in public institutions are more pervasive than in the private institutions.

Determinants

Confidence in institutions relies on citizens' evaluations of institutional and economic performance. Mishler and Rose (2001) show that confidence in institutions is strongly affected by institutional performance (as measured by perceptions of personal freedom, government fairness, political corruption, and government responsiveness to citizen influence) and economic performance (measured by inflation and unemployment) in postcommunist societies. Chanley, Rudolph, and Rahn (2000) find that scandals associated with Congress, increasing public concerns about crime, and negative perceptions of the economy result in declining trust in US government in a time series analysis. Stevenson and Wolfers (2011) study the determinants of confidence in institutions using the global sample from the Gallup World Poll. They find that those countries having significantly increasing unemployment rate tend to experience a dramatically declining trust in both financial institutions and trust in national governments. Some other studies find that political corruption has a strong eroding effect on confidence in public institutions (Chang & Chu, 2006; Morris & Klesner, 2010).

Links to Subjective Well-Being

Declining trust in government not only reduces public support for government actions (Chanley et al., 2000) but also predicts the reduction in ▶ happiness in the United States (Bartolini et al., 2013). Some other studies using cross-sectional data also find a tight link between confidence in institutions and ▶ subjective well-being (as measured by ▶ Cantril Self-Anchoring Striving Scale, ▶ satisfaction with life, or ▶ happiness), while the magnitude of the coefficient of confidence in institutions may vary across studies. Helliwell (2003, 2006), Helliwell and Huang (2008), and Ott (2011) find that ▶ subjective well-being is largely affected by the perceived quality of institutional context in which people relate to each other based on the analysis of cross-national data from the Gallup World Poll. They all use governance indicators provided by the ▶ World Development Indicators in which confidence in key institutions

are measured. Helliwell and Huang (2008) and Helliwell and Wang (2011) all find that confidence in the police is sizably and significantly correlated with subjective well-being.

Cross-References

- ▶ Cantril Self-Anchoring Striving Scale
- ▶ Confidence in Government
- ▶ Corruption
- ▶ Happiness
- ▶ Political Trust
- ▶ Satisfaction with Life
- ▶ Subjective Well-being (SWB)
- ▶ Trust

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Confidence Interval(s)

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Definition

In all inferential statistics, where a characteristic of a population is being inferred from the comparable value in a sample taken from that population, a range of possible values can be obtained because of sampling variation. The confidence interval indicates what that range is likely to be and can be used to discount implausible values.

For example, there are ten individuals (A-J) living in a hostel whose ages are:

A	B	C	D	E	F	G	H	I	J
40	42	44	45	47	48	48	50	52	55

The average age (arithmetic mean) is thus 47.1 years. But what if we take five random samples of three individuals only, and calculate the mean age for each. The samples and the means are:

ABC	BDI	CEH	BFI	GIJ
42	46.3	47	42.6	51.7

The range of means derived from those samples is thus from 42 to 51.7.

There is a large number of different samples of three individuals that can be taken from that population of ten, each of which has its own mean. The true mean lies within that range, but when samples are taken, some of the means derived are more likely to occur than others – it is almost certain, for example, that the mean will be less than 50 if individual J is not in the sample. There is thus probably a narrower range within which most of the estimated means will occur. To identify it, with interval or ratio data, the standard deviation associated with the mean is normally calculated; the standard deviation is the square root of the sum of the mean squared deviations of the individual values from the sample mean. Thus, with sample CEH, the three values are 44, 47, and 50, and the mean is [(44 + 47 + 50/3] = 47. The squared deviations are thus $(44–47)^2$, $(47–47)^2$, and $(50–47)^2$, or 9, 0, and 9, and the standard deviation is the square root of (9 + 0 + 9) = 4.2.

With large samples and normally distributed data, it is known that a set proportion of all values lie within a given standard deviation of the mean. For example, 68.26 % of all values lie within one standard deviation of the mean (i.e., 34.13 % are larger than the mean and 34.13 % are smaller), so that with a mean of 47 and a standard deviation of 4.2, we know that just over two-thirds of all samples of three taken from our individuals A–J would have a mean age between 42.8 and 51.2. Fully 95.46 of all values lie within two standard deviations, so virtually all of the means from a sample of three individuals would lie within the values 38.8 and 55.2.

A major component of sampling theory is the law of large numbers, which says that – again with a normally distributed population – the larger the sample, the closer the estimated value will be to the actual figure; in this sample, size refers to the actual number of individuals sampled, not the proportion of the population. Thus, in our example, if we had taken five samples of five individuals each, the arithmetic mean ages may have been:

ABDFI	BEGHJ	CDEFG	ADEHI	BCEHI
45.4	48.4	46.4	46.8	47.0

This gives a much narrower range of mean ages, from 45.4 to 48.4. The standard deviation for sample BCEHI is 3.4, so we could be fairly confident (i.e., at the one standard deviation level) that the true value lies between 43.6 and 50.4. If we had taken a sample of seven values, say BCEFGHJ, the mean would have been 47.7, and the confidence interval 43.8–51.6. The larger the sample, the smaller is the confidence interval.

Confidence intervals are widely used throughout statistical analysis and the reporting of results from sample data. For example, an opinion poll might be undertaken to estimate the percentage of people who would vote for candidate *X* if the US presidential election were to be held that day. The surveyor might report that according to the sample, 58 % +/−2 % would probably vote for *X* indicating that she is fairly certain that the true value lies between 56 % and 60 % and very certain that it lies between 54 % and 62 % (using the one and two standard deviation intervals).

Confidence intervals are also used in reporting a large number of different types of analysis. In linear regression models, for example, a confidence band around the regression line can be drawn, enclosing a given proportion of all of the individual values, using the estimated standard error. Thus, it might be shown, for example, that the percentage of individuals with cancer increases by 2 points for every year after they are 60, with a standard error of 1, so that if at age 60 the estimated percentage with cancer is 40 at age 65 it will be between 49 and 51 with a one standard error interval and 48–52 with two standard errors.

In much statistical testing of the difference between a sample estimate and the true value, or between two samples, analysts wish to avoid inferring a difference which would probably occur frequently by chance (i.e., in a large number of random samples) by employing significance tests based on the concept of confidence intervals. For example, they might find that the percentage of women in a sample of 60 year

olds with cancer is 42, whereas for men it is 39. Is the "real" difference likely to be at least as large as that in the population from which the sample was drawn? To answer that question, it is common to use the 0.05 significance level, which means that the difference would lie in the extremes (the tails) of the distribution of the differences obtained from a large number of samples – i.e., if a large number of random samples were taken, a difference that large would only occur in 5 or less out of every 100. Standard tests – such as the *t*-test and *Z*-test – have been developed for that purpose.

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Confirmatory Factor Analysis (CFA)

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Definition

Most factor and principal components analyses are inductive (hence they are often termed exploratory factor analyses). They are pattern-seeking exercises identifying latent variables which correspond to general trends in a data set. However, factor analysis can also be used to test hypotheses, to see whether an expected pattern among a set of variables occurs in an observed data set.

In exploratory factor analyses where more than one factor is extracted, rotation seeking "simple structure" (i.e., maximizing the correlation between each of the original variables and one of the latent variables) is commonly deployed. The resulting pattern is then interpreted. In confirmatory factor analyses, on the other hand, the researcher is testing a hypothesis, inquiring whether an expected pattern corresponds to a predetermined simple structure.

As an example, a British city council is planning a series of neighborhood policies, aimed at those areas where particularly disadvantaged groups live. There is more than one such group – areas containing those disadvantaged by their socioeconomic status, by their household situation, and by their cultural background. The groups probably overlap – those from some cultural backgrounds are more likely to have low socioeconomic status, for example – but each needs particular policies, so the council wants to identify the neighborhoods where each is concentrated.

No single census variable available for all of the neighborhoods (census tracts) into which a city is divided can totally encapsulate any of the three concepts. So a series of variables is selected for each – income and occupation for socioeconomic status, for example; housing characteristics and family structures for household situations; and ethnicity, religion, and home language for cultural background. These are identified as the SE, HS, and CB variables respectively, of which there are 4, 5, and 3.

A factor analysis is then conducted on the data and three factors extracted. These are rotated, but rather than rotate them to one of the standard, inductive solutions (such as Varimax) they are rotated to fit, as far as possible a target matrix which has the form:

	F_1	F_2	F_3
SE_1	1.000	0.000	0.000
SE_2	1.000	0.000	0.000
SE_3	1.000	0.000	0.000
SE_4	1.000	0.000	0.000
HC_1	0.000	1.000	0.000
HC_2	0.000	1.000	0.000
HC_3	0.000	1.000	0.000
HC_4	0.000	1.000	0.000
HC_5	0.000	1.000	0.000
CB_1	0.000	0.000	1.000
CB_2	0.000	0.000	1.000
CB_3	0.000	0.000	1.000

The matrix of factor loadings is rotated so that it is as close to that target as possible; the scores

on those three factors are then the wanted socioeconomic status, household situations, and cultural background scales which may – as with oblique rotations – be intercorrelated. In such a case, the desired nature of the latent variables is predetermined, and the goal is test the extent to which the actual patterns fit that hypothesized structure.

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Confirmatory Smallest Space Analysis (SSA)

► Faceted Smallest Space Analysis (Faceted SSA; FSSA)

Confucianism

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Description

Confucianism refers to a general system of ethics that Confucius (1979), Mencius (1970), and their early followers advocated in order to build a moral community of *datong shehui* known as the Great Harmony Society; one where people can live a happy and worthy life (Yao, 2000, p. 275). A detailed account of this community is provided in the following passage from *The Book of Rites* (*Li chi*), a collection of essays which Confucius was known to compile and edit (Hsu 1932, p. 25; Yao 2001, p. 53):

> When the Great Way was practiced, the world was shared by all alike. The worthy and the able were promoted to office and men practiced good faith and lived in affection. Therefore, they did not regard as parents only their own parents, or as sons only their own sons. The aged found a fitting close to their lives, the robust their proper employment; the young were provided with an upbringing and the widow and widower, the orphaned and the sick, with proper care. Men had their tasks and women their hearths. They hated to see goods lying about in waste, yet they did not hoard them for themselves; they disliked the thought that their energies were not fully used, yet they used them not for private ends. Therefore all evil plotting was prevented and thieves and rebels did not arise, so that people could leave their outer gates unbolted. This was the age of Grant Unity.

To build a fiduciary or moral community of *datong* in which people live in ► happiness and peace selflessly, Confucius and his disciples advocated the ethical cultivation of every member of the community, as suggested in the following passages from *The Great Learning* (1: 4):

> When the personal life is cultivated, the family will be regulated. When the family is regulated, the state will be in order. When the state is in order, there will be peace through the world. From the Son of Heaven down to the common people, all must regard cultivation of the person as the root or foundation. There is never a case when the root is in disorder and yet the branches are not in order.

Their vision of *datong* is predicated on the belief that humans are inherently social beings with moral integrity. Accordingly, the Confucian ethical system emphasizes the importance of cultivating humanity through entering mutually beneficial relationships with other people (Tu 1995). To foster mutually beneficial social life, the ethical system identifies five pairs of cardinal human relationships and prescribes the appropriate norms or virtues the people involved in each of these relationship pairs ought to observe.

For the entire range of interpersonal relationships, therefore, Confucianism spells out the specific ► norms or principles of moral behavior that both parties in each relationship must observe in interacting with each other as benefactors and beneficiaries. Only when people fulfill these social obligations can they build a ► community of *datong* or grand harmony.

What are the important roles people ought to play to build such a community? How should they play these roles? Confucianism identifies these roles and their attendant norms in the context of "five cardinal relationships (*wu lun*)," a term often used to refer to social life in general. The roles are ruler and subject (benevolence and loyalty), father and son (love and reverence), husband and wife (obligation and submission), elder and younger brothers (seniority and courtesy), and friend and friend (fraternity).

When asked to elaborate on the nature of each relationship, Mencius (3A: 4) replied, "... between father and son, there should be affection; between sovereign and minister, duty; and between husband and wife, distinction; between old and young, a proper order, and between friends, faith." Mencius and other early Confucians admonish that in interacting with other people, each individual carefully evaluates the nature of the relationship and then plays the appropriate role required for the relationship involved.

One of the five Chinese classics of Confucian literature, *Li Chi* (Chap. 9), which Confucius compiled, further elaborates on the specific ethical codes that should be honored in each pair of the five relationships:

> What are the things which humans consider righteous? Kindness on the part of the father, and filial duty on that of the son; gentleness on the part of the elder brother, and obedience on that of the younger; righteousness on the part of the husband, and submission on that of the wife; kindness on the part of the elders, and deference on that of juniors; benevolence on the part of the ruler, and loyalty on that of the minister. These are the ten things humans consider to be right.

Underlying all five of these cardinal relationships is a notion of reciprocity that requires each person to fulfill his or her responsibility to another. In each of these relationships, the superior has the duty of benevolence and care for the subordinate, while the subordinate has the duty of being obedient to the superior. When asked whether there is "any one word that can serve as a principle for the conduct of life," Confucius replied "reciprocity" (*Analects* 15: 24), an answer that rejects a hierarchical arrangement featuring one-way obedience. The subordinate's obedience is, therefore, not unconditional; it is contingent upon the superior's observance of his or her duty to be benevolent.

For Confucius and his early followers, therefore, each relationship can become *harmonious* only when the two parties involved meet the complementary and mutual role obligations. When both parties engage in a mutually beneficial interchange, they will be able to overcome egoism to become authentically human. When each relationship becomes harmonious, the whole community becomes peaceful and orderly. Confucianism is, therefore, sometimes characterized as a philosophy of mutuality or an ethical system of reciprocal relations.

In Confucianism, therefore, fulfilling responsibilities to other people takes priority over claiming individual rights. To underline the importance of these responsibilities, Confucius said, "Now the man of perfect virtue, wishing to establish himself, seeks also to establish others; wishing to enlarge himself, he seeks also to enlarge others" (*Analects* 6: 30). "The superior man cultivates himself so as to give the common people security and peace" (*Analects* 14: 45).

In short, Confucian ethical doctrine emphasizes the importance of mutually beneficial reciprocal relationships for the building of a harmonious community in which people can live in happiness. Confucius, Mencius, and other early Confucians all taught that people would be able to live a good life only when they interact closely with other people and abide by a host of civic norms, including those of *ren* and *li*. In the belief that humans are inherently good and they can become virtuous in character and deed through constant interactions with others, they offered a system of ethics, which contrasts sharply with the liberal system of ethics created by Western thinkers of the Enlightenment.

While the Western liberal system of ethics is built on autonomous individuals, and aims to protect their contractual relationships, the Confucian system is grounded in the belief that the cultivation of virtue is of paramount importance

for individuals and their societies and seeks to develop a community of mutual ▶ trust by promoting affective relationships among its members (Tu 1994, pp. 196–197). Of the two systems, it is the Confucian system that encourages both self-improvement and social responsibility at the same time. In principle, therefore, it can be considered better designed for contributing to the building of a humane and just society in which the dignity of each individual is recognized and material goods are equally distributed (Tan 2003).

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Conjoint Measurement

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Synonyms

Additive conjoint measurement

Definition

Conjoint measurement is a technique that is aimed at inferring measurement or interval scales from rank-ordered factorial data.

Description

By defining measurement as the assessment of quantity, measurement boils down to counting how many units of a certain magnitude can be found in the variable being measured. Ideally, this process should parallel measurement in physics where the measurement of length implies comparing the length of the attribute with that of a unit (e.g., a 1-m stick). However, such units do not exist for subjective (or psychological) variables, which implies that researchers are unable to directly measure psychological or subjective variables. In response to this, the theory of conjoint measurement (Luce & Tukey, 1964) was proposed specifically for quantification within the social sciences (Michell, 1990; p. 68).

As people are thought to be unable to directly quantify their feelings and thoughts, a traditional conjoint measurement study asks for rankings instead of direct ratings. In particular, stimuli are constructed by combining several stimulus attributes according to a full-factorial design and respondents are asked to compare all possible pairs of stimuli. For example, in their ▶ quality of life study, Stalmeier, Bezembinder, and Unic (1996) paired four health states (i.e., metastasis, prophylactic mastectomy, genetic counseling, and healthy) to 10 durations (i.e., 1 month, 8, 16, 20, 23, 26, 29, 32, 42, and 55 years) with the aim of measuring the utility of the four health states. A sample comparison in their conjoint measurement experiment was the following: "which do you prefer: 20 years in genetic counseling or 15 years with prophylactic mastectomy?"

In a next step, conjoint measurement uses the patterns that are observed in these ordinal data to build interval scales. This is done primarily by testing whether the patterns in the data support the quantitative nature of the attribute, and when

this condition is satisfied, a measurement or interval scale is constructed.

The quantitative nature of the attribute is assessed by testing whether a dependent variable can be modeled as a noninteractive or additive combination of two or more independent variables. Provided that a noninteractive combination holds, three conditions are satisfied. These three conditions, central to conjoint measurement, are the following:

1. Double cancellation
2. Solvability
3. The Archimedean condition

In what follows, the three conditions are explained by means of an example. As already mentioned, in a typical conjoint measurement experiment, the independent variables are crossed according to a full-▶ factorial design, and subjects are asked to rank order all possible combinations of the independent variables. In the case of quality of life (Q), stimuli may be created by the factorial combination of a number of levels of physical well-being (PH) to a number of levels of psychological well-being (PS). Let $a, b, c, \ldots$ be values of PH and $x, y, z, \ldots$ be values of PS. Moreover, assume that Q is an additive function of PH and PS. Then, all stimuli can be written in a matrix form:

		PS			
		x	y	z	$\ldots$
	a	$a+x$	$a+y$	$a+z$	$\ldots$
PH	b	$b+x$	$b+y$	$b+z$	$\ldots$
	c	$c+x$	$c+y$	$c+z$	$\ldots$
	$\ldots$	$\ldots$	$\ldots$	$\ldots$	$\ldots$

Double Cancellation

The condition of double cancellation can be illustrated as follows. Let $a + y \geq b + x$ and $b + z \geq c + y$. Then double cancellation is satisfied if and only if $a + z \geq c + x$. This follows from $a + y \geq b + x$ and $b + z \geq c + y$, implying that $a + y + b + z \geq b + x + c + y$, which simplifies to $a + z \geq c + x$.

Solvability

The solvability condition requires that the variables PH and PS have enough levels to produce any required value of Q, or each level Q has an element in PH and an element in PS. In other words, given any three values of a, b, x, and y, the fourth exists so that the equation $a + x = b + y$ is solved.

The Archimedean Condition

The Archimedean condition says that there is no infinitely greatest level of Q, and hence, there is no greatest level of either PH or PS. Thus, any difference between levels of PH (PS), no matter how large, cannot be infinitely larger than other differences within PH (PS). Stated differently, if b is larger than a, there exist levels x and y of PS which make the levels of Q equal ($a + x = b + y$).

Whereas double cancellation can be tested directly, solvability and the Archimedean condition can only be tested indirectly. In particular, Scott's (1964) finite set of cancellation conditions can be used to test these axioms indirectly. For example, if both PH and PS possess three levels, the highest-order cancellation axiom within Scott's (1964) hierarchy that indirectly tests solvability and the Archimedean condition is double cancellation. With four levels, it is triple cancellation.

In case Q, PH, and PS satisfy (1) double cancellation, (2) solvability, and (3) the Archimedean condition, Q is a noninteractive or additive function of PH and PS (Krantz, Luce, Suppes, & Tversky, 1971). This implies that the original cell values can be represented as additive combinations of the row and column effects. Hence, the row and column effects are linear measures of PH and PS. In case an interaction between PH and PS is found, it is tested whether the cell values can be monotonically transformed so that additivity can be achieved. Following the work of Luce and Tukey (1964), additive conjoint measurement has been extended to deal with nonadditivity, partially ordered data, and any polynomial type of function (Green & Rao, 1971).

Although conjoint measurement provides an elegant framework for measuring subjective variables, it has had little empirical success. Papers by Stalmeier et al. (1996) and by Maas and Stalpers (1992) are exceptions in the field of quality of life research. It has been argued that this is due to two things. First, there is the high

level of formal mathematics involved (e.g., Cliff, 1992). Second, the theory has never succeeded in developing goodness of fit tests and therefore cannot account for the "noisy" data typically encountered in psychological research (e.g., Perline, Wright, & Wainer, 1979).

Whereas conjoint measurement was almost exclusively practiced by mathematical psychologists with the goal of identifying conditions under which measurement scales exist, applied researchers have emphasized the scaling aspects, that is, finding specific numerical values for the variables under consideration (Green & Srinivasan, 1978). From this applied interest, the closely related method of conjoint analysis was born. Conjoint analysis is considered a stochastic variant of the theory of conjoint measurement (e.g., Brogden, 1977; Embretson & Reise, 2000; Fischer, 1995; Keats, 1967; Kline, 1998; Scheiblechner, 1999). Whereas conjoint measurement and conjoint analysis are often used interchangeably, the major difference is that in conjoint analysis, one assumes rather than tests the composition rule (Green & Srinivasan, 1978). Compared to conjoint measurement, conjoint analysis was considerably more successful, especially in marketing research but also in the domain of quality of life research.

Finally, the method of ▶ functional measurement also relates to conjoint measurement. However, both methods differ in two crucial points. First, functional measurement uses continuous response scales instead of ordinal ones and provides a framework allowing for the validation of linearity of the response scale (Anderson, 1981, 1982, 1996). Second, similar to conjoint measurement, the key assumption of functional measurement is that valid measurement rests squarely on the validity of empirical integration models. Yet, in contrast to conjoint measurement, functional measurement has developed goodness of fit tests that allow for testing these integration models.

Cross-References

▶ Factorial Design
▶ Functional Measurement
▶ Partially Ordered Set
▶ Quality of Life

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Connectedness with Nature and Well-Being

► Nature Relatedness and Subjective Well-Being

Connection Between Policymakers and Administrative Level

► Program Implementation

Connections, Social

► Relational Goods

Connectivity (Street Patterns and Social Networks)

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Synonyms

Accessibility; Street and social networks; Networks, social and street

Definition

Connectivity indicates that parts of a whole – a set of street segments or a group of people – are interconnected and communication can flow. Connectivity can range from low to high.

Description

Street patterns refer to the ways in which formal movement routes are organized in towns and cities. Work on social aspects of street patterns has focused on multipurpose streets that carry several forms of traffic: from pedestrians and cyclists to buses and truck freight. There are many types of street patterns varying by topology (overall organization, what is linked to what), street curvature (affecting the look and feel of the street), and block size or grain (relating to how closely intersections are spaced). Grid-like street patterns or semi-lattices (a term used by Alexander 1966) allow many options for getting between two points because each street segment links to several other segments, for example, at a 4-way intersection. Cul-de-sac, loop, and collector style street patterns exhibit a more treelike structure with large roads leading to smaller and smaller roads. Each street segment has relatively few connections and people wanting to move from one place to another need to go through the same major streets with relatively few options (Marshall 2004).

Social networks, or formal and informal connections between people, may also have a strong link to particular places, for example, a network of people employed at the same job site. Many, however, are only broadly spatial, such as the network of academic obesity researchers or of Seventh-Day Adventists.

A proposition in several philosophies of urban or town design has been that more connected street patterns foster ► social interaction particularly in residential and mixed use areas (where residences are mixed with shops, workplaces, cultural institutions, etc.). This is because fine-grained, semi-lattice street patterns, with many small blocks and lots of options for moving around, are convenient and interesting for pedestrians. More pedestrian traffic means more chances for people to meet and recognize each other in a local area. Some propose that these interactions are mainly casual neighboring but others imply stronger friendship links. ► New Urbanism provides one of the strongest sets of advocacy for this connection. As stated in the Charter (Congress for the New Urbanism [CNU], 1996), "Streets and squares should be safe, comfortable, and interesting to the pedestrian. Properly configured [as modified grids], they encourage walking and enable neighbors to know each other and protect their communities."

Research has been mixed about the social implications of street patterns. For example, the cul-de-sac, the twigs of the treelike structure, may have

rich social life because there is not a lot of through traffic and people may be more inclined to use the street for activities such as play. In addition, while the vehicular network may be treelike, many such areas allow pedestrians to cut through either on formal pedestrian paths or more informal linkages. Many social networks are not clearly linked to movement systems but rather destinations (e.g., community centers, job sites) or are related to other kinds of factors (e.g., kin, work, faith) (Keller 1968; Biddulph 2000).

Space syntax provides a popular formal way of analyzing these spatial connections; however, more traditional surveys, interviews, and observations are typically needed to assess social relationships.

Cross-References

- ▶ Accessibility
- ▶ Community Planning
- ▶ New Urbanism

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Conscious Living and God

- ▶ Health-Related Quality of Life and Reliance on God's Help

Consensus

- ▶ Public Opinion

Consequences of Happiness

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Synonyms

Effects of happiness

Definition

Effects of enjoying life or not, on oneself, on other people and society.

Description

While the focus of happiness research is typically on *determinants* of happiness, there is also a strand of research on *consequences* of happiness. An early publication on this subject was published by Veenhoven in 1988. A recent review of the literature is found in Lyubomirsky, Diener, and King, (2005). A listing of all the literature on this subject is available in the Bibliography of Happiness (Veenhoven, 2012) Section Q "Consequences of Happiness," which involved some 300 titles in January 2012.

Relevance

Knowledge on effects of happiness is relevant in discussions on the value of happiness and in particular in discussions on the merits of the utilitarian creed that we should aim at greater happiness for a greater number of people. If happiness has bad consequences, such as making people lazy uncritical and egocentric, that would plea against this ethical principle. Several opponents of utilitarianism have indeed argued that happiness spoils and one of these is Aldous Huxley, who in his famous "Brave New World" depicts happy people as sullen consumption slaves.

Knowledge on effects of happiness is also required if one does aim at greater happiness. The question is then to what extent greater happiness will affect sources of happiness, such as marital bonds, and will therefore be sustainable or not. Likewise policymakers want to know how greater happiness will work out on other policy aims, such as freedom and equality. Policymakers serve different goals and have for that reason a preference for synergetic goals.

Topics

One strand of research is at the *macrolevel* and tries to assess the effects of a happy or unhappy populace on societal development, for instance, whether unhappiness of citizens fuels discrimination of minorities. This literature is listed in Section Qb1 of the above-mentioned Bibliography of Happiness. Another line is at the *meso-level* and considers effects on the functioning of organizations, typically work organizations. One of the questions is then whether the happiness of employees adds to business success (Section Qc02 of the Bibliography). A third strand is at the *microlevel* and considers effects on individual functioning, psychological functioning, as well as physical functioning. A topic in the latter theme is the effect of happiness on longevity (Section Qc03). A question at all these levels is how much happiness is optimal; there is a small literature on whether one can be too happy (Veenhoven, 2012, Section Qe04.01).

Methods

One way to identify causal effects of happiness is to depart from cross-sectional correlations and try to filter out reverse causality. For instance, in the case of the correlation between happiness and income using path analysis to see whether consumption is a mediating factor. A better way is follow-up, for instance, check whether people who were happy earlier make more money later in life. Experimental studies can also give a clue, for instance, when people in a happy mood do better in negotiation games.

Findings

All effects of happiness shown so far are positive. As yet there is no evidence for the often assumed negative effects of happiness. Much of the research supports Fredrickson's (2004) "Broaden and build theory," which holds that happiness broadens the behavioral repertoire, which results in the building up of resources.

Macrolevel

Cross-national comparisons have shown that happiness of citizens tends to go hand in hand with desirable functioning of society, such as with more economic activity and less social conflict. Though it is often difficult to disentangle causal effects at this level, the data bear no indications of negative effects. This means that there is no great conflict between individual and society, at least not at the present stage of societal development (Veenhoven, 2009). Shortage of time-series data limits longitudinal analysis as yet. Still there is good evidence for a correlation between rising happiness and positive social developments, such as economic growth and political democratization, one of the mechanisms being that happiness fosters activity.

Meso-level

Though there is a wealth of research on job satisfaction and organizational performance, there is as yet little data on the effects of life satisfaction. None of the available studies found a negative correlation between life-satisfaction and performance at work, and follow-up studies by Wright, Cropanzano, and Meyer (2004) documented a clear relation between earlier happiness and later improvement of performance. Happy people invest more in voluntary organizations, which is also likely to add to institutional functioning. As yet there is a remarkable lack of research on the effects of happiness on the functioning of schools.

Microlevel

Contrary to the stereotype of the happy lotus eater, happiness appears to be an energizing force. Happiness fosters activity and creativity. One of the reasons is probably that happiness works as a *go signal*, informing the organism

that the coast is free, while feeling unhappy rather signals that something is wrong and presses to restraint. This activating effect manifests in better work performance but also in better performance in intimate relations. Happy people are more helpful, more emphatic, and provide more support. As a result they develop more stable and rewarding relationships. There is also evidence for beneficial effects of happiness on several aspects of psychological functioning, such as on perceived fate control. There is also good evidence of positive effects of happiness on physical health, one of the manifestations being that happy people live longer (Diener & Chan 2011; Veenhoven, 2008).

There are indications that happiness makes us more prone to positive illusions and that this gives rise to more risky behaviors. Yet a recent study by Goudi et al. (2011) showed that happy people use safety belts more often.

Cross-References

- ▶ Happiness
- ▶ Utilitarianism
- ▶ World Database of Happiness

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Consequentialism

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Synonyms

Utilitarianism

Definition

"Consequentialism" refers to a family of theories in normative ethics characterized by the view that the moral *rightness* of an object of evaluation (such as an action) consists solely in how much overall *good* that the object generates.

Description

"Consequentialism" refers to a family of theories in normative ethics characterized by the view that moral *rightness* of an object of evaluation consists solely in how much *good* that the object of evaluation generates (Moore, 1903). At the broadest level, we can categorize different types of consequentialism according to what the appropriate object of evaluation is, what the good consists in, and how the good is aggregated. According to the most famous version of consequentialism – ▶ utilitarianism – the appropriate objects of evaluation are *acts* and the relevant good consists in ▶ *happiness*, which is

summed by aggregating the total net changes in happiness over everyone that the candidate action affects (Bentham, 1843; Mill, 1861). On this view, the one and only morally right act in any given circumstance is that act which, among all those available to the actor, will generate the greatest net positive change in overall happiness. We can derive different versions of consequentialism by varying what the appropriate object of evaluation is, what the good consists in, and how the good is aggregated.

The Good to Be Generated

Against utilitarianism, we might think that happiness does not have intrinsic value or that it is not the only thing with intrinsic value. For example, we might think the good consists (partly or solely) in respect for human rights. According to rights consequentialism, the right act is that which minimizes the violation of ▶ human rights (Nozick, 1974, pp. 25–28). Or, we might think that the good consists in the fulfillment of the preferences we would endorse on rational reflection. According to preference consequentialism, the right act is that which maximizes the satisfaction of preferences, suitably constrained (Brandt, 1979). Consequentialists who deny that there is only a single ultimate good deny a monistic theory of value in favor of a pluralistic theory, according to which there are various fundamental goods to be maximized.

The Object of Evaluation

Consequentialists are not beholden to the view that *actions* are the relevant (or the only relevant) object of moral evaluation. For example, a consequentialist about *motives* will hold that the right motive is that which, when we act from it, will generate the most good overall (Sverdlik, 2011). A consequentialist about *character traits* will hold that the morally right character traits are those which, when adopted, will generate the most good overall (Hurka, 2001).

Consequentialism about acts, character traits, and motives are all versions of *direct* consequentialism, according to which the moral rightness of x depends only on the consequences of doing or adopting x. Some versions of direct consequentialism, it is argued, are collectively self-defeating in certain circumstances (Parfit, 1984, pp. 87–110). For example, if everyone individually decides, on consequentialist grounds, whether to engage in activities that promote their own convenience but cause pollution, then each individual will very often be morally permitted (or even required) to engage in the activity if the pollution it generates is marginal and the resulting convenience is substantial – even if in aggregate the activity makes things worse overall. *Indirect* consequentialism avoids the "tragedy of the commons" by disallowing acts that, individually, would be justified on direct consequentialist grounds but in aggregate make things worse overall. According to indirect consequentialism, the rightness of x does not depend on the good that x generates but rather on the good that y generates, where x is morally right just in case it is suitably related to y. For instance, according to rule consequentialism, which is the most common type of indirect consequentialism, the moral rightness of an act depends on whether it is in accordance with a rule which, if everyone were permitted to act in accordance with it, would generate the best consequences. Thus, for example, a rule consequentialist would say that we ought not to marginally contribute to pollution (despite that an arbitrary instance of this activity is beneficial) for if everyone were permitted to do this, it would fail to make things go best.

Measuring Consequences

Of course, it is epistemically unrealistic to demand that we predict of every action available to us what its consequences will be. According to *objective consequentialism*, when the mistakes we make are reasonable, we ought not to be blamed, precisely because blaming people for reasonable mistakes would fail to yield the best consequences. According to *subjective consequentialism*, the morally right action is not the one that will yield the best consequences but rather the one that has the highest expected value. On this view, the agent who performs the act with the highest expected value, but which ultimately fails to yield the best consequences, is not to be

blamed since the morally right act *just is* the act with the highest expected value.

On either view, it might seem that we are required to constantly calculate the expected value of all the acts available to us at every given moment. But neither version of consequentialism makes any such demand. Consequentialism is a theory which specifies what makes an act morally right – it is not a theory which says how we ought to decide what the morally right action is. Put differently, consequentialism provides the criteria of rightness for an act – not a decision procedure for action. If it turns out that, in most circumstances, acting according to a heuristic, such as a rule of thumb, or simply according to common sense makes things go best, then that is the type of deliberation consequentialism would prescribe (Hare, 1981; Railton, 1984). But when the stakes are high, as with far-reaching decisions made by governments or other institutional bodies, consequentialism would likely require the decision-makers to calculate the expected value of the relevant options.

Considerations Against Consequentialism

Paradigm examples of consequentialism such as utilitarianism are very demanding, because we are required to make things go best and because consequentialism does not morally distinguish between outcomes that we bring about through our actions and those that allow to occur through our inaction – all that matters in determining how we ought to act are is our ability to affect the net sum of *value* in the world. If utilitarianism is correct, then using my income to purchase a new pair of jeans – or perhaps even my child's education – would almost certainly be morally wrong, since doing so would fail to maximize utility; instead, I ought to donate that money to the most effective charity (Singer, 1993; Unger, 1996). Non-consequentialists deny that we are always morally required to perform the act that makes things go best from an impersonal perspective. For instance, some non-consequentialists argue that there are *agent-centered prerogatives* permitting us, in certain circumstances, to favor our own projects, even if doing so would require performing an action ranked suboptimally from an impersonal perspective (Scheffler, 1982). Thus, for example, some argue that we have an agent-centered prerogative permitting one to save the life of his or her own mother over the lives of two strangers, given that these are the only choices.

Consequentialism is also criticized on the grounds that it will morally require us to commit acts that are intuitively abhorrent. There are no types of acts that consequentialism rules out in principle as morally impermissible, since for any such type of act, there are situations conceivable in which performing a tokening of that type will bring about the best consequences. For example, if torturing a single child is the only way to prevent more than one child from being tortured, then standard versions of consequentialism which place disvalue on pain will require that we torture the child, despite our intuitions that doing so is morally abhorrent. Thus, some non-consequentialists deny that we are always morally permitted to perform the act that makes things go best from an impersonal perspective; they claim that there is an *agent-centered constraint* prohibiting individuals from maltreating others in certain ways even if such an act yields an outcome ranked best from an impersonal perspective (Nagel, 1986). Put simply, it is argued that consequentialists cannot properly account for considerations of justice and human rights (Rawls, 1971, pp. 19–24). These considerations have led some to introduce agent-relativity into a consequentialist axiology (Broome, 1991; Portmore, 2001, 2007; Sen, 1982; Smith, 2003; Louise, 2004), though others argue that the resulting theory cannot be properly regarded as consequentialist (Schroeder, 2005).

Considerations in Favor of Consequentialism

Despite the fact that consequentialism will sometimes require us to do what we intuitively regard as supererogatory and will sometimes permit us to do what we intuitively regard as impermissible, consequentialism remains a powerful account in normative ethics, partly a result of the supposed rationality of its teleological structure. Consequentialists point out that once we have identified something of value, it seems irrational to choose an option that we know will bring about

less of what we value. Thus, consequentialists argue that agent-centered reasons are *irrational* insofar as they permit us to bring about what the proponents of these reasons themselves acknowledge as suboptimal outcomes – such reasons permit us to make the world a worse place, which seems irrational.

In addition, consequentialism is a more theoretically simple theory than its competitors. Whereas consequentialists claim that all values ought to be promoted, non-consequentialists are committed to the view that some values ought to be promoted, whereas others ought to be *honored*, in that we ought to act in ways that manifest these values in our actions, rather than in ways that promote these values overall (Pettit, 1991). Non-consequentialists need to provide a principled explanation of why this is so; consequentialists, on the other hand, are not faced with this challenge, since they claim that all values ought to be promoted, simply.

In assessing the ▶ quality of life, a consequentialist approach has evident advantages – it has identified the factors constitutive of human (or animal) ▶ welfare, which allows us to quantify welfare in any individual; we then sum the individual quantities in a population thereby yielding the aggregate welfare of that population. On a consequentialist framework, the correct course of action or decision is the one which generates the greatest net sum of welfare in the target population.

Cross-References

- ▶ Deontology
- ▶ Ethics
- ▶ Morality and Well-Being
- ▶ Virtue Ethics
- ▶ Well-Being, Philosophical Theories of

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Conservation Area

- ▶ Parks and Quality of Life

Conservation of Resources Theory

- ▶ Work-Family Enrichment

Consistency

► Reliability, Statistical

Constant Proportional Trade-Offs and Health State Evaluations

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Definition

Constant proportional trade-offs (CPTOs) hold that the proportion of remaining life years that one is willing to give up for an improvement in health status from any given health state to any better health state does not depend on the absolute number of remaining life years.

Description

Introduction

The quality-adjusted life year (QALY) model has become an important model in valuing health benefits. To make the model practical, measurement methods are needed in order to elicit the quality of life weights used in this model. One such method is the ►time trade-off (TTO) method, which is often used to derive (standard) quality of life weights for health states to be used in economic evaluations (Dolan, 1997; Lamers, Stalmeier, Krabbe, & Busschbach, 2006). The popularity of the TTO, however, cannot be explained by the absence of methodological problems. On the contrary, the TTO has been shown to be prone to several influences such as loss aversion, scale compatibility, and utility of duration (i.e., discounting) (Bleichrodt, 2002).

One important and necessary assumption of the QALY model is that of constant proportional trade-offs (CPTO). In the context of TTO, CPTO basically requires that the estimated TTO value should be the same for different durations. For example, if in valuing some imperfect health state β using a 10-year TTO, people would indicate they are willing to trade off 2 years (i.e., 20 % of total time), then CPTO requires them to give up 2 months when using a 10-*month* TTO or 2 days when using a 10-*day* TTO. The proportion traded should always be equal (i.e., 20 %). CPTO is also practically important when one considers the use of the valuation of health states in economic evaluations and medical decision making: they are attached to such health states regardless of the duration of the health problem, normally. If, therefore, the assumption of CPTO does not hold, health state valuations could be time dependent – that is, health states could be valued differently when their durations differ.

The evidence on the validity of the CPTO assumption is mixed. Some empirical studies found support (Bleichrodt & Johannesson, 1997; Dolan & Stalmeier, 2003), while others rejected it (Stiggelbout et al., 1995) or found mixed results (Bleichrodt, Pinto, & Abellán-Perpinán, 2003). Given the importance of the assumption and the mixed evidence for it, more research in this area seemed warranted. Attema and Brouwer (2010) therefore discussed the current evidence regarding CPTO on the basis of a literature review and highlighted the role of the utility of life duration in this debate. Before, most studies that found violations of CPTO assumed linear utility of life duration (i.e., no discounting of future life years). However, it seems implausible that the subjects in these studies would have satisfied that assumption. Therefore, if one were to correct for utility of life duration curvature, these subjects might have satisfied CPTO in terms of utilities for life duration after all. In other words, proportions of health traded off in TTO exercises may in fact be the same for different durations if one corrects for utility of life duration curvature despite the fact that uncorrected TTO values vary with duration. That would indicate that the QALY model does hold in a more general form and that only the assumption regarding the shape of the utility of life duration function has to be relaxed in order for CPTO to be satisfied.

This entry summarizes two studies that performed experimental tests on CPTO that are

robust for utility of life duration. The organization of this entry is as follows. In the next section, a short background of CPTO is given. The third section continues by summarizing the two experimental studies performed by Attema and Brouwer (2010, 2012). The final section discusses what can be concluded from the results and proposes directions for future research on this topic.

Background

Investigators of TTO often assume linear utility of life duration. The QALY model then simplifies to the *linear* QALY model, where equal weight is assumed to be attached to all health state values regardless of their timing. Pliskin, Shepard, and Weinstein (1980) gave an axiomatic derivation of a particular version of the QALY model for constant health profiles. They proved that for the utility function of life duration to be a power function (with the linear function as a special case), it is necessary that CPTO be valid. *CPTO* holds if the proportion of remaining life years that one is willing to give up for an improvement in health status from any health state β_1 to any health state β_2 does not depend on the absolute number of remaining life years (Pliskin et al., 1980). However, individuals may have a utility of life duration function that does not belong to the power family but instead to some other parametric family. In that case, CPTO does not need to be confirmed, but it may very well be that the answers of such individuals do satisfy the assumption of CPTO in terms of *utilities of* life years instead of *absolute number of* life years. That is, the proportion of remaining *utility* of life years that one is willing to give up for an improvement in health status from any health state β_1 to any health state β_2 does not depend on the *utility* of the absolute number of remaining life years. In other words, the QALY model may still hold, albeit with fewer restrictions on the shape of the utility function for life duration. When the utility function for life duration is exponential instead of a power, for example, CPTO may hold in terms of utilities of life years but not in terms of the absolute number of life years. In other words, the linear CPTO assumption is not necessary for the generalized QALY model to hold. CPTO in terms of utility of life duration will be termed *generalized CPTO*.

CPTO can be violated due to other reasons than utility of life duration as well (see, e.g., Bleichrodt, 2002), like loss aversion (i.e., the phenomenon that people are more sensitive to losses than to gains when viewed from a particular reference point (Tversky & Kahneman, 1991)) and maximal endurable time (MET, i.e., the fact that some bad health states can only be endured during some period of time after which its value becomes negative (Sutherland, Llewellyn-Thomas, Boyd, & Till, 1982)). Depending on the magnitude and direction of these biases, CPTO may be violated in both directions or the biases may cancel out so that CPTO is not violated on the aggregate (or may mistakenly be perceived as not being violated when the violation itself is balanced by other biases).

A better understanding of the validity of the assumption of CPTO therefore depends on a better understanding of the magnitudes of the different biases affecting TTO responses and correcting for them as far as possible. In the conventional TTO procedure, loss aversion may cause subjects to be overly reluctant to give up life years, leading to relatively high health state valuations. MET will lead to higher values for bad health states for short durations, because for longer durations, extra time in that health state will be valued negatively. While loss aversion is likely to be present in all TTO valuations, the presence of MET depends on the health state under valuation. Moreover, the influence of utility of life duration curvature, for instance caused by discounting, is also present in normal TTO valuations, but its influence will likely vary with the time horizon chosen and can be corrected for.

As noted in the introduction, the evidence about the empirical validity of the CPTO assumption is mixed. Attema and Brouwer (2010) reviewed previous studies of CPTO and showed that these studies have found negative or mixed evidence, but normally only considered rather short time horizons and, therefore, could not

make an inference about the relationship between TTO scores and duration for a large number of years. Sixteen empirical studies of CPTO were found, of which six did not reject CPTO, six reported lower TTO values for longer durations, one reported the opposite, and three reported mixed results. Four studies corrected for utility of life duration curvature, but this correction did not seem to have a clear influence on the results regarding the validity of the CPTO assumption. Furthermore, no clear relationship between CPTO and MET was observed. It was difficult, therefore, to derive any definite answers from the literature regarding CPTO. Most evidence pointed towards higher values for short durations, yet all but one of the studies supporting this conclusion did not correct for utility of life duration curvature. This could have strongly influenced results, given the time horizons chosen. It appeared that more evidence was required in order to understand the relationship between health state duration and valuation better. To this end, Attema and Brouwer (2010, 2012) conducted two experiments on CPTO, which are summarized in turn below.

Experimental Results

Experiment 1

In order to test generalized CPTO, Attema and Brouwer (2010) obtained a robust measurement of utility of life duration, alongside two common TTO measurements for a mild health state (back pain), and used the former measurement to correct the latter for utility of life duration. In particular, they employed the conventional procedure of fixing the remaining lifetime in an impaired health state and asking for a shorter remaining lifetime in full health, but also performed the reverse procedure, that is, fixing lifetime in full health. Both procedures were performed for two gauge durations (14 and 27 years for the conventional procedure, and 10 and 22 years for the reverse procedure). As a result, Attema and Brouwer (2010) could test linear (using the uncorrected TTO scores) and generalized CPTO (using the utility of life duration-corrected TTO scores).

Results

For both uncorrected and corrected TTO values, CPTO was rejected, with the scores being higher for longer than for shorter durations (paired t-tests, $p < 0.01$). This finding was in contrast with most of the aforementioned studies. The results therefore indicated that correcting for utility curvature and avoiding MET were not sufficient to restore the validity of the assumption of CPTO.

Intermezzo

To sum up, the reviewed studies showed that TTO scores tend to be high for short durations, potentially indicating that individuals do not want to give up many life years when their ▶ life expectancy is short. On the other hand, TTO scores may be higher for longer durations, as in Experiment 1, because individuals may have some maximum number of life years they are prepared to sacrifice irrespective of the life expectancy in the impaired health state. Based on the latter reasoning, Attema and Brouwer (2010) hypothesized a U-shaped relation between TTO scores and gauge duration. In particular, since no CPTO tests had yet been performed using a wide variety of gauge durations, they argued for an explicit test of this hypothesis.

Experiment 2

The explicit test referred to above was performed, in a follow-up study, by Attema and Brouwer (2012). They tested CPTO over a broad range of gauge durations (1, 3, 7, 10, 15, 19, 26, 31, 39, and 46 years) in a within-subjects setting, both with and without controlling for utility of life duration and using the same health state as Attema and Brouwer (2010). Indifferences were determined by using a choice-based bisection procedure.

Results

Attema and Brouwer (2012) could not accept the hypothesis that gauge duration does not matter for uncorrected TTO scores (Friedman test, $p < 0.01$), rejecting the linear CPTO assumption. Moreover, neither the hypothesis of a negative relationship between TTO scores and gauge

duration nor the hypothesis of a U-shaped relationship was supported by the data. Correcting for utility of life duration decreased the magnitude of the variation somewhat, but the conclusion did not change and the hypothesis of generalized CPTO was rejected as well (Friedman test, $p < 0.01$). There tended to be an upward trend for corrected TTO scores, that is, lower proportions of total utility were traded off to regain full health for longer gauge durations. On the other hand, in absolute terms, the differences in mean TTO scores for the different gauge durations were fairly small.

It seems that heuristics have influenced the answers of a substantial part of the subjects. In particular, after analyzing the revealed number of life years in full health that was considered equivalent to the stated number of life years with back pain, we found the following peculiarities. Subjects seemed to focus on multiples of ten when making choices for the longer durations. Furthermore, an unwillingness to give up more than around 2.5 years explained the increase in TTO scores when the gauge duration rose from 10 years to 19 years. Thus, the absolute level of *sacrificed* years may have played a role here, to some extent irrespective of gauge duration. Finally, for the durations shorter than 10 years, many subjects just wanted to give up the lowest possible amount, although there was more variability in the answers here, causing the TTO scores not to be higher than for the longer durations.

Conclusion

What can we infer from these results other than that we have added to the confusion regarding constant proportional trade-off? We believe some important observations need to be made.

First, the review of the literature shows that violations of CPTO are common. Though the violation often causes a shorter duration to result in a decreased willingness to trade and, therefore, higher health state valuations, the opposite has also been reported. The reviewed studies differ in many respects, including the time horizon chosen and whether a correction for utility of life duration curvature has been applied. Not many studies did the latter. Of the four that did, three found no violation of CPTO, while one found that shorter durations resulted in higher valuations. However, again, differences between these studies in terms of design make it difficult to derive general conclusions from the existing evidence.

The here presented studies were clearly small and their study samples consisted of students, which hampers generalizations beyond this group. Still, we found robust violations of CPTO for both uncorrected and corrected TTO values in our sample. We found that the magnitude of the violation was much smaller for the conventional TTO procedure (fixing time in an imperfect health state) than for the reverse one (fixing the period in full health). This was also found by Bleichrodt et al. (2003) and stresses the importance of other biases and influences than discounting that may result in the observed violation of CPTO.

Because generalized CPTO was also rejected, our findings indicate a more fundamental rejection of the QALY model. The results of the first experiment suggested that individuals do not trade off utility of life duration for health status at a constant rate but may instead do so at a rate that depends on the duration involved. For relatively long durations, like the ones used in Attema and Brouwer (2010), the amount of years traded is relatively low, also after correction for utility of life duration curvature. Given this finding, the plausibility of relatively high TTO values for very short durations (who would trade off 2 days to avoid low back pain when having only 10 days left to live?) and the diverse violations of CPTO reported in the literature (which indeed must be related to the fact that TTO values vary strongly between studies, as reported by Arnesen and Trommald (2005)), it was interesting to hypothesize on the shape of this relationship between duration and trade-offs.

Because of the importance of loss aversion in the TTO (Bleichrodt, 2002; Bleichrodt et al., 2003), we hypothesized that a possible

explanation for the variation in findings and therefore for a general relationship between health state duration and health state valuation in TTO was driven by this bias. In a conventional TTO with a "short" duration, loss aversion and scale compatibility may relate especially to the amount of time left to live and stronger for shorter time horizons (durations). Loss aversion then causes respondents to be overly reluctant to give up life years, leading to relatively high TTO values. For "long" durations, on the other hand, the absolute amount of years sacrificed may become dominant in the trade-off, that is, the reference point of the subjects changes, with people being reluctant to trade off more than some absolute amount of time. Thus, the absolute amount of time remaining is most influential when the TTO uses short durations and the absolute amount of time sacrificed is most influential for longer durations. The result will be that individuals give up fewer years for short and long durations, and less driven by these considerations in-between these two points, causing TTO values to be a U-shaped function of duration.

However, in the second experiment, the CPTO condition was again rejected, although the magnitude of the violation was modest and the specific TTO procedure used may have contributed to the violations, because of particular heuristics. Correcting for utility of life duration did not change this conclusion, so that the generalized CPTO condition was rejected as well. The correction for utility of life duration did have other effects, though, since the TTO scores were significantly increased and variability in TTO scores decreased for all gauge durations after correcting for utility of life duration.

Furthermore, no clear relationship between gauge duration and TTO score was observed. We instead found an alternating pattern, which was seemingly caused by anchoring heuristics. In addition, when comparing only subsets of the included gauge durations (i.e., comparing not all durations included in the study, but certain combinations of durations), CPTO was not always rejected. This provided a possible explanation for the support for CPTO in previous empirical work. The use of long time horizons might have caused MET to become important (Dolan & Stalmeier, 2003). However, the lack of a negative relationship between TTO scores and gauge duration suggests that the mild health state we used was not considered sufficiently serious to become worse than dead after some time.

Another, thus far neglected, phenomenon may influence TTO scores as well: that is, the elicitation mode by which subjects reveal their indifference between two options. Many studies have used some version of an open-ended elicitation mode to elicit TTO scores, where subjects had to give a number of years in full health that made them indifferent to the stated number of years in an imperfect health state. Instead, Attema and Brouwer (2012) used a choice task. Their results suggest that loss aversion for short durations is far less important for choice tasks than matching tasks, in accordance with other studies (Bleichrodt et al., 2003; Unic, Stalmeier, Verhoef, & van Daal, 1998). In particular, the shortest durations did not yield higher TTO scores than the other durations, suggesting that a choice-based design causes subjects to put less emphasis on the maximization of remaining lifetime.

For a number of gauge durations, subjects tended to take some focal point (usually a multiple of ten) as their anchor and provided an answer close to that anchor. This anchoring heuristic offers an explanation for the alternating relationship between TTO scores and duration. Moreover, the heuristic is not a particularity of the choice design, since Attema and Brouwer (2009) used a matching design and found a similar focus on 10-multiples. Our findings highlight the constructive nature of health state valuation tasks, causing contextual effects to have a substantial influence on the elicited utilities. How to best avoid these heuristics is an open question.

To conclude, our results are mixed evidence for the TTO method and the QALY model. It seems that the (generalized) QALY model may be too simple: the trade-off of life years is indeed not so constantly proportional and, therefore, health state valuations may depend on the duration of these health states.

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Construct Validity

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Definition

Construct validity is the rational-empirical process for identifying the psychological attributes of a measure or scale (Cohen & Swerdlik, 2005).

Description

Conceptually, the meaning of a test score is established by locating it within a nomological network of both similar and dissimilar psychological constructs. This process is theoretically informed. Empirically, the conceptual boundaries are established by creating an expected pattern of ▶ *convergent validity* (showing that the scale correlates with other psychological measures to which it is conceptually similar) and ▶ *discriminant validity* (showing that the scale does *not* correlate with measures to which it is conceptually dissimilar) coefficients. To be effective, the psychological scales to which an instrument is correlated must themselves be empirically established constructs. While it is common practice that construct validity entails correlating a measure with other psychological measures, there are other techniques that can be used for establishing construct validity. These include, but are not limited to, demonstrating structural validity (that the items of a scale produce the putative factor structure underlying the scale), incremental validity (that the scale evidences significant predictive capacities over other similarly existing measures), and group differences (that different known groups display mean level differences in expected directions). Construct validity is an iterative, continuing process by which the interpretive value of a construct is developed and the range of its

application (i.e., relevance to different cultural, age, racial groups) is determined.

Cross-References

- ▶ Convergent Validity
- ▶ Discriminant Validity

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Consumer Choice

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Synonyms

Consumer preferences

Definition

Consumer choice is a term developed in economics to reflect preferences/tastes to consumer demand curves. In the same respect, the term utility is also used broadly in economics to describe the satisfaction or enjoyment derived from the consumption of a good or service. Indifference curves are being employed to reflect consumers' tastes, highest possible levels of satisfaction or total utility, and the impact of income or prices change on consumer behavior.

Description

The basic economic behavior hypothesis is that a rational consumer always chooses a most preferred bundle of commodities (goods and/or services) from the set of feasible alternatives.

Given that a location can be described by a vector of characteristics, z, specifying the ▶ quality of life of the location, we conclude that the ▶ quality of life that a consumer enjoys depends on his location decisions, that is, on the places he chooses to live and work. The elements of vector z specify the climatic, environmental, urban, ▶ health, ▶ education, cultural, etc., conditions of a location.

Assuming that labor transportation costs are negligible, and that a consumer has/uses one house, the consumer choices are the solutions to the following optimization problem:

$$\max\ U(x,\ h, z_h,\ z_w)$$

$$\text{with respect to}\ x,\ h, z_h,\ z_w$$

$$\text{subject to}\ y(z_w;\ l) = p\ x + P(h,\ z_h)$$

where,

U(.) is a utility function, z_h is the z-vector at the place where the consumer lives (it includes all amenities and disamenities of the place where the consumer's house is located), h is a vector of housing characteristics (e.g., number of floors, year dwelling built, number of rooms, central heating, central air, number of units at address, city sewer, elevator), $P(h, z_h)$ is the equilibrium housing hedonic equation (amenities and disamenities) that clearly affects housing prices and labor earnings (e.g., see Blomquist et al., 1988; Giannias, 1991), z_w is the z-vector at the place where the consumer works (it includes all amenities and disamenities of the place where the consumer works), l is a vector of labor characteristics (e.g., sex, race, education, experience, union member, marital status), $y(z_w; l)$ is the equilibrium labor-earning hedonic equation, x is the vector of other goods, and p is the vector of market prices of other goods.

The calculation required to solve the above optimization problem for given structures is quite complex. "Rosen (1974) briefly discussed this possibility for a situation that has only one characteristic of the differentiated product and he found

that the calculation required even for this simplified case is quite complex. This led Rosen to propose a methodology for estimating the demands and supplies of characteristics in a second stage rather than using the hedonic equation directly" [p. 85].

Most of the research, after Rosen's article, followed this nonstructural approach; see, for example, Blomquist, Berger, and Hoehn (1988) and Harrison and Rubinfeld (1978). Epple (1984, 1987) and Giannias (1990, 1996a, 1998a) present closed form solutions for special cases of the above general optimization problem and specific functional forms for utility and hedonic equations. According to Braden and Kolstad (1992, p. 86) "Such analyses are instructive for understanding the workings of the hedonic model"; for applications of the structural approach, which is based on having closed form solutions, see Giannias (1989, 1996b, 1997, 1998b).

Cross-References

- ▶ Education
- ▶ Environmental Amenities and Disamenities
- ▶ Health
- ▶ Quality of Life (QOL)

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Consumer Confidence Index

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Synonyms

Conference board consumer confidence index; Consumer confidence indicator; University of Michigan consumer sentiment index

Definition

A Consumer Confidence Index (CCI) implies behavior of individuals toward the real economy. The index measures the degree of ▶ optimism that the consumers feel about the overall state of the economy, i.e., it measures public confidence in the economy. Confidence expressed as optimism tends to generate greater confidence and in turn greater optimism, whereas lack of confidence in the general economic situation generates uncertainty and restrains the economy. The self-fulfilling character of consumers' expectations renders their study important if we are to understand economic climate in the future. The index is used as a means of monitoring consumers' expectations and investigating their

effect on the real economy, i.e., on consumer spending, household investment, stock market developments, business cycles fluctuations, and ▶ GNP growth. The most widely followed measures of consumer confidence in the USA are the University of Michigan Consumer Sentiment Index and the Conference Board Consumer Confidence Index. The EU uses the Consumer Confidence Indicator.

Description

In general, a Consumer Confidence Index is a forward-looking measure (Acemoglu & Scott, 1994) as it relates expectations, attitudes, and sentiments about the future with future consumption and economic cycles. Empirical studies tend to focus on testing for the informative and predictive power of micro spending behavior such as the Rational Expectations-Permanent Income Hypothesis (REPIH) (Acemoglu & Scott, 1994; Hall, 1978), while theoretical concerns focus on the rationality of consumers' expectations (Acemoglu & Scott, 1994; Arkes, Herren, & Isen, 1988; Edmans, Garcia, & Norli, 2007; Hall, 1978; Hirt, Erickson, Kennedy, & Zillman, 1992) and multiple equilibria in macroeconomics, i.e., on the predictive power of consumer sentiment over the variation of standard macroeconomic variables (Akerlof & Shiller, 2009; Benabou, 2008; Blanchard, 1993; Cooper & john, 1988; Jansen & Nahuis, 2003; Ludvigson, 2004; Matsusaka & Sbordone, 1995).

The ▶ University of Michigan Consumer Sentiment Index (MCSI) or else the Michigan Index began as an annual ▶ survey in the late 1940s, converted to a quarterly survey in 1952, and was established as a monthly survey in 1967 (Bram & Ludvigson, 1998; Ludvigson, 2004). It is run by the University of Michigan's ▶ Institute for Social Research. The Conference Board Consumer Confidence Index or Conference Board Index was launched on a bimonthly basis in 1967 and was established on a monthly basis in 1977 (Jansen & Nahuis, 2003; Ludvigson, 2004). Both indexes base the overall evaluation of consumers' attitudes on five questions while they report two components, a present situation component (two questions) and an expectations' component (three questions) based on the respective questions regarding present conditions and expectations regarding the future.

The present questions of the Michigan Index are as follows:

1. Do you think now is a good or bad time for people to buy major household items? [good time to buy/uncertain, depends/bad time to buy]
2. Would you say that you (and your family living there) are better off or worse off financially than you were a year ago? [better/same/worse]

The corresponding expectations questions of the Michigan Index are as follows:

3. Now turning to business conditions in the country as a whole – do you think that during the next 12 months, we'll have good times financially or bad times or what? [good times/uncertain/bad times]
4. Looking ahead, which would you say is more likely – that in the country as a whole we'll have continuous good times during the next 5 years or so or that we'll have periods of widespread unemployment or depression, or what? [good times/uncertain/bad times]
5. Now looking ahead – do you think that a year from now, you (and your family living there) will be better off financially, or worse off, or just about the same as now? [better/same/worse]

The present conditions questions of the Conference Board Index are as follows:

1. How would you rate present general business conditions in your area? [good/normal/bad]
2. What would you say about available jobs in your area right now? [plentiful/not so many/hard to get]. The corresponding expectations questions are

The corresponding expectations questions of the Conference Board Index are:

3. Six months from now, do you think business conditions in your area will be [better/same/worse]?
4. Six months from now, do you think there will be [more/same/fewer] jobs available in your area?

5. How would you guess your total family income to be 6 months from now? [higher/same/lower]

The EU uses the Consumer Confidence Indicator. The Consumer Confidence Indicator is built on selected questions addressed to consumers according to the Joint Harmonised EU Programme of Business and Consumer Surveys. The Directorate General for Economic and Financial Affairs (DG ECFIN) conducts regular harmonized surveys for different sectors of the economies in the European Union (EU) and in the applicant countries. They are addressed to representatives of the industry (manufacturing), services, retail trade, and construction sectors, as well as to consumers. These surveys allow comparisons among different countries' business cycles and have become an indispensable tool for monitoring the evolution of the EU and the euro area economies, as well as monitoring developments in the applicant countries. The surveys are conducted on a monthly basis and involve a total number of 11 questions regarding the past 12 months, the present situation, and the next 12 months. This indicator is published by the European Commission for all EU countries except Luxembourg.

The Consumer Confidence Indicator is based on the following four questions from the consumer survey:

1. How do you think the financial position of your household will change over the next 12 months? [a lot better/a little better/the same/a little worse/a lot worse/don't know]
2. How do you think the general economic situation in this country will change over the next 12 months? [a lot better/a little better/the same/a little worse/a lot worse/don't know]
3. How do you think the level of unemployment in the country will change over the next 12 months? [increase sharply/increase slightly/remain the same/fall slightly/fall sharply/don't know]
4. Over the next 12 months, how likely are you to be able to save any money? [very likely/fairly likely/fairly unlikely/very unlikely/don't know]

Cross-References

- ▶ Gross National Product (GNP)
- ▶ Optimism
- ▶ Self-Fulfillment
- ▶ Survey
- ▶ University of Michigan Consumer Sentiment Index

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Consumer Confidence Indicator

► Consumer Confidence Index

Consumer Expenditure

► Household Expenditure

Consumer Preferences

► Consumer Choice

Consumer Price Index

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Synonyms

Measures of price change over time

Definition

A measure of the average change over time in the prices paid by consumers for a market basket of consumer goods and services.

Description

The consumer price index (CPI) is used to measure changes in prices. It is widely used as a measure of change in the cost of living and of the rate of inflation in an economy. The inflation rate is the annual percentage change in the CPI.

One component of the quality of life of an individual is their income, that is, their ability to buy goods and services to take care of their daily needs. If their income has gone up, but the prices of goods and services that they buy have also gone up, has their quality of life risen or fallen? The CPI can be used to convert annual cash income (nominal income) into income adjusted for price changes (real income) and so determine whether this component of their quality of life has risen or fallen. In turn, this allows a more accurate rendition of ► family income and wealth.

The CPI is a measure of the average of the prices of a "basket" of consumer goods and services purchased by households. It is a statistic designed to compare how these prices have changed over time. The CPI is defined to equal 100 for a time period called the base period; for example, the base period could be the year 2001. If the CPI was 105.5 in the year 2002, this number tells us that the average of the prices of the basket of goods and services has risen by 5.5 %.

To better understand the CPI, consider calculating the CPI for a one-item basket. Let us use the example of a loaf of bread. Suppose the price of a loaf of bread was $2.00 in 2001 (the base period) and $2.15 in 2002 (period one). The single-item CPI is 100 in 2001 and is calculated as $(2.15/2.00) \times 100 = 107.5$, for period one. This CPI indicates the price of a loaf of bread has risen 7.5 % in 1 year. In order to calculate this index, a statistical agency would have to do surveys of the market in 2001 and 2002 to determine the price of a loaf of bread in each period.

Now consider a multi-item basket of goods and services. In most countries, the CPI is designed to measure price change of the goods and services bought by urban households. There are hundreds of items in the basket – from bread to haircuts, to restaurant meals, and to gasoline – often aggregated into groups such as food, shelter, transportation, and clothing. The multi-item CPI is calculated by first calculating the index for each item in the basket, and then the multi-item CPI is the weighted average in the individual indices. In order to calculate the multi-item index, the statistical agency needs to determine what items to include in the basket and what weights to assign to the individual price indices. These are determined from regular surveys (but not annual surveys) of the consumer expenditures of the average urban household. So, for example, if urban

households spend 1 % of their total expenditure on bread, that single-item index will have a weight of.01 in the weighted average multi-item index.

Thus, the CPI compares the cost of a basket of goods and services at two different times. If the household had a nominal income of $10,000 in the base period and the CPI was 103.2 in period one, the household would need an income $10,000 × 103.2 = $10,320 to be able to buy the same basket of goods and services as in the base period. Thus, if their nominal income rose from $10,000 to $10,200, while the CPI rose to 103.2, their real income would have fallen. This component of their quality of life would have declined.

In the economy, many arrangements call for payments over time, for example, workers receive wages or retirees receive pensions. Often the intent of the arrangement is that annual payment increases over time to take account of increases in the cost of living. Thus, wages or pensions are sometimes indexed to the CPI to ensure that recipients are just as well off, that is, could buy the same basket of goods and services over time, even though prices are changing.

There are many complexities to calculating and using the CPI. The CPI is intended to measure the average of the prices of an unchanging basket of goods and services – each item in the basket must be identical over time. But many goods change in quality over time; the statistical agency must try to calculate a quality-adjusted price. As prices change, households change the share of their income spent on that item, but the CPI uses constant weights for each item. New goods enter the basket of goods actually bought by households; an example in recent years would be smart phones. It is difficult to create a CPI consistent over time when new goods are phased in. And finally, the CPI uses the basket of an average urban household. Any actual household will likely buy a slightly different basket of goods and spent a slightly different share of their income on each good than used in the CPI.

Cross-References

► Family Income and Wealth

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Consumer Quality of Life

► Consumer Well-Being, Consumption Life Cycle

Consumer Satisfaction

► Customer Satisfaction

Consumer Society

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Definition

There may be different understandings for the term consumer society; in this entry it refers to a situation where the long-established relationship between persons and commodities has reversed. In other words, it refers to a society which has moved from a situation where commodities are produced to satisfy the needs of persons in order to increase their well-being to a situation where persons are induced to purchase commodities in order to keep production raising. In a consumer society persons may end up being no more than plain consumers, losing all human deepness and being socially shaped to become mere gadgets whose role is to purchase so as to fuel the production process.

This is a crucial issue in the study of quality of life, because it refers to the issue of whose life is being considered when quality of life is being studied.

Description

Economic theory assumes a close association between a person's consumption and his/her quality of life. The argument states that people do have needs and that these needs can be satisfied with goods and services. The well-being that people get from the satisfaction of needs constitutes their motivation for purchasing goods and services. In consequence, a larger availability of goods and services allows for the satisfaction of more needs and, as a result, for increasing people's well-being. These goods and services are produced by firms; however, according to economic theory, the motivation of firms in producing goods and services is not to generate goodness but to generate profits. It is the person's role to ensure that by seeking profits firms do contribute to his/her well-being. The presumption of a close association between consumption and well-being led to conceiving poverty as a low-income situation – meaning that people have little access to goods and services – and conceiving progress as economic growth, meaning an expansion in the availability of goods and services in society.

The stated relationship between consumption and well-being relies on several assumptions; of particular relevance are the sovereignty and the rationality assumptions. It is assumed that persons are able to take their consumption decisions on the basis of criteria and knowledge regarding what is good for them; it is also assumed that persons do not make systematic mistakes – people learn from mistakes and do not repeat them – and that they can perfectly foresee the well-being implications of any decision.

The rationality and sovereignty assumptions do imply that people are in control of the whole production and consumption process. Those firms that produce commodities which do not contribute substantially to people's well-being are driven out of the market. Market discipline enforces firms to use their resources in such a way as to make the largest possible contribution to people's well-being. Hence, under these circumstances consumption makes a larger contribution to the well-being of people. Sovereignty and rationality do also imply that there is no use in questioning people's consumption patterns, since each person flawlessly knows how to spend his/her money in attaining the highest well-being. It is stated, in consequence, that production follows people's well-being interests.

However, both the rationality and sovereignty assumptions have been seriously criticized in the literature, leading to an opposite view where people end up molding themselves to the interests of the production system.

Are people rational? Some decades ago Simon (1955, 1982) proposed that people intended to act rationally but were unable to do so because of cognitive limitations; he suggested that people were rationally bounded. Thaler (1992, 2000) and Loewenstein and Schkade (1999) also argue that people have limited cognitive abilities which imply the making of systematic errors. Kahneman (1994) and Kahneman and Tversky (1973, 1979) have shown that even if people aim to make the right choice there are decision biases which imply people ending up with low well-being even when spending a lot. People cannot adequately foresee all the well-being consequences of their decisions, in special when these are non-repeated decisions. Further research shows that people make systematic biases in their purchasing decisions (Hsee & Hastie, 2006). A different line of research questions people's capabilities to exercise control in their purchasing decisions (Ameriks, Caplin, Leahy, & Tyler, 2004; Rook, 1987; Weinberg & Gottwald, 1982); excessive credit card debt burdens and undesired overweight illustrate this condition. People are easily persuaded to make purchases even if there is little well-being attained, which is an argument advanced by Packard (1957) a long time ago and ratified by Kotler (1999). It has become clear that shopping and consuming are not identical; people may shop a lot while consuming little, since

consumption also requires time and attention from the person to enjoy the purchased commodity. In consequence, consumption may not contribute a lot to people's well-being; people are purchasing a lot, but this does not imply that they are getting a lot of well-being. Happiness research can contribute to the scientific study of these issues which have been dominated mostly by uncorroborated theories. Frey, Benesch, and Stutzer (2010) and Stutzer (2007) have studied the well-being implications of lack of self-control, while Rojas (2008) found that many people spend their income in ways that lead to a beneath-potential economic satisfaction.

Are people sovereign? The autonomy of people to the production process has been questioned by many authors. Galbraith (1958) suggested that needs were being purposely created by firms so as to keep sales rising. Even Kotler (2003), who is considered the father of modern marketing, seems to agree with this proposition when he states "*If there are no more needs – by which I mean, everything we think of, there's someone supplying it – then we have to invent new needs*" (p. 9). This argument raises the question about where do people's desires to buy come from; the answer seems to be that they do come from a social environment which is not neutral to the interests of the production sector. The role of society in molding the purchasing desires of socially immersed human beings is also proposed by some postmodernist writers, for example, Bourdieu (1986) calls attention to the role of social classes in influencing people's tastes, while Baudrillard (1998, 2000) sees in consumption a way for people interacting with others and signaling codes that transmit information about who they are. Both authors seem to agree that in impersonal societies consumption plays a role in shaping and signaling people's identity. It is noteworthy to mention Foucault's argument (1969) about the vanishing of the person in modern societies; there is no longer an autonomous person behind the purchasing decisions. In other words, the person – as an agent dissociated from his/her consumption bundle and with a pre-consumption identity – has disappeared in modern societies; this autonomous persons have been replaced by consumers whose identity is defined by trends, fashions and life styles and who, in consequence, are easily malleable and have no pre-consumption identity (Lipovetsky, 1987). In consequence, persons could become no more than a list of commodities, as they are not only defined by the commodities they do posses, wear, and show off, but they are also treated as commodities themselves.

Recent research on the architecture and plasticity of the brain – especially at young age – suggests that wants and satisfiers could be molded by patters of upbringing and social context (Berridge, 1996, 2003; Kringelbach & Berridge, 2009).

The flaws in people's sovereignty and rationality may imply that people are not exercising the discipline that is expected and, in consequence, that firms have room to maximize profits by selling goods and services that contribute little to people's well-being. This opens the possibility for reversing the direction of the relationship from production following people's well-being interest to people ending up following the interests of the production system.

An excessive emphasis in societies on consumption decisions and on "consumers" rather than on persons risks neglecting other domains of life where people exercise as human beings and which may be important sources of life satisfaction. The domains-of-life literature has shown that human beings derive satisfaction from their activities in many domains. The economic domain is important, but other domains such as family (spouse, children, parents, rest of family), leisure, health, and occupation domains are also important (Rojas, 2006, 2007). Hence, people are much more than mere consumers; however, as it was stated by Foucault (1969), there is a risk not only for the neglecting but also for the vanishing of this human richness if society moves from a human one to a consumer one.

The move from a human society, composed by human beings, to a consumer society, composed of consumers, raises fundamental questions about whose life is being considered when quality of life is being studied. It also raises fundamental questions about what is people's role in society.

Cross-References

- ▶ Consumption
- ▶ Life Satisfaction
- ▶ Poverty
- ▶ Quality of Life
- ▶ Rationality
- ▶ Well-Being

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Consumer Spending

- ▶ Household Expenditure

Consumer Well-Being

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Synonyms

CWB

Definition

The discussion over the definition of consumer well-being reveals that it is an open debate in the relevant literature owing primarily to the multidimensional character of the concept and the delay in admitting the societal aspects of the phenomenon. From an economics' orientation, consumer well-being (CWB) relates to the ▶ satisfaction derived from the consumption of goods and services, that is, to the satisfaction of needs. The more needs are addressed, the more satisfied the individual (Lee, Sirgy, Larsen, & Wright, 2002; Mick, 2008; Sirgy, Lee, & Kressmann, 2006). Consumer well-being is reemerging in the marketing field as an important societal concept under the view that consumption generates important societal impact. Consumer well-being is defined as ▶ satisfaction with various consumer life subdomains (Day, 1987; Lee et al., 2002).

Description

Consumer well-being is the central component of ▶ quality of life at the individual level, and it refers to people's cognitive and affective evaluations of their lives. The cognitive component is an individual's life satisfaction, while the affective component is a person's hedonic balance between positive and negative affect (Schimmack, Radhakrishnan, Oishi, Dzokoto, & Ahadi, 2002). According to Sirgy, Lee, and Rahtz (2007), consumers' search to increase the quality of their lives relates to the fulfillment of two wide sets of needs, namely, micro (individual-level) needs, that is, ▶ health and ▶ happiness, and macro (societal) needs, that is, ▶ sustainability and social responsibility. As Sirgy et al. (2007: 341) indicate "macro-needs are distinguished from micro-needs in that macro-needs deal with needs related to the broader society while micro-needs are more directly part of the experience of the person. But of course perceptions regarding both types of needs reside in the individual."

Acknowledging the multidimensional character of the concept and thus the inherent difficulty in defining it, a number of indicators have been developed primarily for the empirical operationalization of the concept. These indicators can be categorized under two broad domains, namely, the economic indicators, focusing on the measurement of wealth, and the physical indicators, focusing on the measurement of health (Pancer, 2009).

The concept of consumer well-being is based on the idea that individuals have needs which seek to satisfy through major activities that are segmented in life domains (Pancer, 2009). Sirgy and Lee (2006: 43) define consumer well-being in a more inclusive way as "a state in which consumers' experiences with goods and services – experiences related to acquisition, preparations, consumption, ownership, maintenance, and disposal of specific categories of goods and services in the context of their local environment – are judged to be beneficial to both consumers and society." According to Malhotra (2006), a definition of consumer well-being would remain narrow at the macro level if it is heavily weighted towards ▶ materialism and omits other relevant aspects such as consumer socialization, involvement with society, and social causes. Pancer (2009) argues that indeed all existing definitions of consumer well-being are restricted towards satisfaction and ignore a variety of sociocultural factors that are at play in determining the level of ▶ consumer well-being.

Cross-References

- ▶ Consumer Well-Being, Consumer Sentiment
- ▶ Consumer Well-being, Materialism
- ▶ Happiness
- ▶ Indicators, Quality of Life
- ▶ Materialism
- ▶ Quality of Life
- ▶ Sustainability

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Consumer Well-Being, Consumer Complaints

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Definition

Various conceptualizations and measures have been developed to assess consumer well-being (CWB). One of these conceptualizations – the consumer complaint model – captures CWB based on complaint data. This particular CWB measurement tool is available in countries where there are formal and functioning consumer complaint mechanisms. The underlying logic of the consumer complaint model of CWB is that "a high level of complaints in relation to a specific company or brand represents a lower level of CWB -specific to that company and brand" (Sirgy, Lee, & Rahtz, 2007, p. 342), and similarly, a low level of complaints can be translated into a higher level of CWB.

Description

In a well-functioning complaint system, consumers from any part of a country submit their inquiries to consumer protection agencies and register their formal complaints against companies for various problems they (the consumers) experience related to the companies' offerings. Once a complaint is received, in addition to sending it to appropriate agencies/parties for resolution, the consumer protection agencies also process the complaint through the databases to make it available for other consumers who plan to purchase and/or use the same company's products and services. In the United States, for example, institutions such as the Better Business Bureau (BBB) provide consumers with opportunities to file their complaints against a particular company, a product, a service, and/or a brand.

Understanding CWB through consumer complaints can be traced back to the idea of "consumer sovereignty" (Smith, 1995). Consumer sovereignty points out that the consumers can serve a society by engaging in rational and well-informed decisions and, as a result, wisely exercising their economic votes (i.e., their expenditures). Consumers engaging in search activities related to prior consumer complaints about a company, a product, a service, or a brand before their purchases can be considered acting in line with the idea of consumer sovereignty. This way, consumers can be said to be serving (or contributing) to the well-being of a society by engaging in search/shopping activities that result in more optimum utilization of personal and societal resources. Consumers who file a formal complaint through the consumer protection agencies (such as the BBB) also contribute to the well-being of the society by helping others make "wiser" decisions. As such, even though the consumer complaint model (as described above) may appear as a "micro" (i.e., company/individual consumer level) articulation of CWB, its implications are far

beyond micro and actually at mezzo and macro levels. In summary, a well-functioning consumer complaint system can contribute to individual and societal well-being in a number of different ways:

1. By reviewing the existing complaint data made available by the consumer protection agencies (such as the BBB), consumers can make better-informed decisions regarding their future purchases and, as a result, use their (and society's) scare resources more wisely.
2. Better-informed decisions may lead to a greater consumer satisfaction with various domains of CWB, including acquisition, preparation, consumption, and ownership experiences of consumers (Sirgy & Lee, 2006). Consumer complaint information can help a consumer to have more positive experiences in these domains and, thus, contribute his or her sense of well-being. High levels of CWB, in turn, lead to higher levels of consumers' QOL (Sirgy et al., 2007).
3. Availability (existence) of such complaint/consumer protection agencies help build consumer agency. Consumers feel a sense of control and power against the companies that provide products and services for them. This heightened sense of control, through the creation of consumer agency, in turn, contributes to CWB. It is safe to assume that developed countries provide greater opportunities for their citizens to air their complaints. However, the existing research points out the importance of such complaint mechanisms for the quality of life (QOL) of developing countries as well. For example, in a recent study, conducted in the context of a developing country (Turkey), Ekici and Peterson (2009) demonstrated that consumer trust in market-related institutions (including consumer protection agencies such as the BBB) contribute positively to citizens' assessment of their QOL. The authors argue that the quality consumer education and credible consumer information (e.g., in the form of consumer complaints data collected by trusted instructions) is likely to positively contribute to the QOL of the citizens in developing countries.

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Consumer Well-Being, Consumer Sentiment

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Synonyms

Consumer well-being; Marketing, quality of life

Definition

Consumer sentiment is a subset of consumer well-being indicators that measure consumers' attitudes toward price, product, promotion, and distribution in a marketing system (Gaski & Etzel, 2005) as well as their attitudes toward market-related institutions that compose the aggregate marketing system (Wilkie & Moore, 2006). Using the social indicator framework proposed by Sirgy et al. (2006), the measures of consumer sentiment are subjective, positive social indicators that fall into the conceptual family of quality of life (QOL) marketing.

Description

As a microcosm of the broader field, descriptions and understandings of consumer sentiment have evolved over time to accommodate the predominant discourses in marketing theory and practice. Early emphasis was placed on measures of consumer sentiment that could serve as predictors of economic output such as the Conference Board's Consumer Confidence Index and the University of Michigan Survey Research Center's Index of Consumer Sentiment (Gaski & Etzel, 1986). While these measures offered insight into periodized economic well-being, the accentuation of economic prediction limited the ability of the measures to capture more modern conceptions of marketing, marketing systems, and consumer well-being (Hagerty et al., 2001).

With discourse shifting from economic prediction to understanding consumer attitudes, scholars such as Barksdale and Darden (1972) began to construct measures designed to better understand consumers' attitudes toward business activities. As an extension of efforts to determine how consumers evaluate the activities of marketers and a marketing system, Gaski and Etzel (1986) developed the Index of Consumer Sentiment toward Marketing (ICSM) as a standardized, validated measure of consumers' attitudes toward marketers and a marketing system as captured by its four main domains: price, product, promotion, and distribution. The 44 items on the questionnaire quantified consumer sentiment as consumer satisfaction in these four domains. The ICSM continues to serve as a foundation for contemporary consumer sentiment constructs that have been applied to subjective well-being (SWB) and QOL research.

There are three main stages of contemporary investigation into consumer sentiment as it relates to SWB and overall QOL. As part of efforts to extend the cross-cultural validity of the ICSM, Chan and Cui (2004) evaluated a second-order construct that would clarify the relationship between consumer attitudes and marketing domains. The resulting measure, consumer attitudes toward marketing (CATM), was further enhanced by Peterson and Ekici (2007) with the addition of business provisioning items in their study analyzing the correlation between CATM levels and overall QOL in a developing country.

The next stage of contemporary consumer sentiment investigation mirrors renewed interest in the macro-sphere of marketing and its interaction with society. Within the aggregate market system (AGMS) proposed by Wilkie and Moore (2006), consumers form part of an interactive triad with marketers and government. Adopting a macro-institutional perspective of the AGMS, Ekici and Peterson (2009) utilized the consumer trust in market-related institutions (CTMRI) measure that captures consumer attitudes toward (1) government regulators, (2) consumer groups, (3) manufacturers and business, and (4) both the news and entertainment media to study the disparate correlational relationship between CTMRI levels and overall QOL for poor and nonpoor populations in a developing country.

The most current stage of contemporary consumer sentiment was investigated by Peterson, Ekici, and Hunt (2010). By uniting the two other applications (CATM and CTMRI) as mutually relevant consumer sentiment constructs, they developed a three-stage flow model that encompasses correlations between changes in attitudes toward marketing over a 5-year period with business' contribution to QOL (BCM-QOL) and overall QOL. The combined model offered additional insight into the nature of the relationships between subdimensions of consumer sentiment (CATM and CTMRI) as second-order constructs of business' contribution to QOL. The remainder of the entry will focus on a detailed presentation of the most current stage of standardized measures relating consumer sentiment to consumer well-being/QOL and a discussion of further research possibilities.

Business' Contribution to QOL as a Function of Consumer Sentiment

Peterson, Ekici, and Hunt's, 2010 study in the developing country context of Turkey proposed and tested a three-step model of business' contribution to QOL five years after a devastating national economic crisis. The three-step model included three standardized measures

(CATM, CTMRI, and BCM-QOL) that were related to overall QOL. The basic structure of the model incorporated both a beneficent dimension of the marketplace (represented by consumer attitude toward marketing – CATM) and a non-maleficent dimension (represented by consumer trust for market-related institutions – CTMRI). As part of their investigation of the relationship, the study compared how the poor and the nonpoor draw differently on these two subdimensions of consumer sentiment in forming their perceptions about how business contributes to their QOL. The study found evidence supporting a causal model that (1) introduced a first-order construct – business' contribution to my quality of life (BCM-QOL) – and (2) explained how BCM-QOL serves as a mediator between marketplace perceptions of both beneficence (CATM) and non-maleficence (CTMRI) and overall QOL. Additionally, results from the study revealed differences between how the poor and the nonpoor in a developing country thought about the effects of market changes after an economic crisis.

Measures Utilized in the Study

The conceptual foundation for the consumer attitudes toward marketing (CATM) construct is that consumers' sentiment toward key activities of marketing practice indicates the marketing system's performance in delivering well-being to consumers (Gaski & Etzel, 1986; Varadarajan & Thirunarayana, 1990). As an adaptation and refinement of Gaski and Etzel's (1986) Index of Consumer Sentiments toward Marketing (ICSM), CATM was first studied in the context of QOL by Peterson and Ekici in their 2007 study of Turkish consumers. Evidence was found that key business activities such as perceived value and truthfulness of advertising, the perceived value of retail experiences, perceived fairness in pricing, and satisfaction with the provision of goods and services shape consumers' market attitudes. Using a confirmatory factor analysis approach, the four factors (positive advertising, retail experiences, fairness in pricing, and business provisioning) were used to derive a second-order factor representing CATM. A moderate positive relationship between CATM and QOL was found (Pearson's correlation coefficient = .47). Twelve total items (four factors × three items) comprise the purified CATM construct.

Within the AGMS, citizens consider the extent to which they trust institutions (the government or business) to fulfill their role in a satisfying manner. Utilizing this framework as a basis, Ekici and Peterson (2009) assessed the consumer trust in market-related institutions (CTMRI) construct as a measure of Turkish consumers' trust in the perceived performance of such institutions and as a correlate of overall QOL. As they interact with different institutional facets of the AGMS, consumers direct institutional trust at market-related institutions such as government regulators, consumer groups, manufacturers and retailers, and the media. Using a confirmatory factor analysis approach, the four factors (government regulators, consumer groups, manufacturers and retailers, and the media) were used to derive a second-order factor representing CTMRI. The relationship between CTMRI and QOL was dichotomous with the financially constrained consumers exhibiting a moderate positive relationship between CTMRI and QOL (Pearson's correlation coefficient = .43), while the relationship between CTMRI and QOL for nonfinancially constrained consumers was not statistically significant at $\alpha = .05$. Thirteen items comprise the purified CTMRI construct.

Three additional measures were used: Attitude Toward 5-Year Change in Marketing, BCM-QOL, and Diener, Emmons, Larsen, and Griffin's (1985) Satisfaction with Life Survey (SWLS). The study adopted an expectancy-value approach to the measurement of Attitude toward the 5-Year Change in Marketing (Fishbein & Azjen, 1975). The degree of perceived change in each of the four marketing management dimensions was multiplied by the importance of this dimension to the consumer. Finally, a summative scale was created by adding the products of multiplying the perceived change of each dimension by the importance of each dimension. The measure served as an exogenous variable reflecting how such changes have influenced current levels of trust for CATM, CTMRI, and downstream QOL

constructs for consumers in developing countries. Introduced in Peterson et al.'s, 2010 study, business' contribution to quality of life (BCM-QOL) measures perceptions of how local businesses, national businesses, multinational businesses, new product developers, and marketing research companies contribute to consumers' overall quality of life. This five-item construct was hypothesized as a mediating first-order construct between QOL and the second-order consumer sentiment constructs of CATM and CTMRI. The study also employed Diener et al.'s (1985) Satisfaction with Life Scale (SWLS), a five-item measure intended to assess cognitive aspects of well-being.

Survey and Sampling

The study included a survey of a broad cross section of Turkish consumers 21 years of age and older following the protocols used by Peterson and Ekici (2007) in their study of developing country consumers. Seven-point Likert-type scales were used (1 = strongly disagree, 7 = strongly agree). Using the survey administration procedures detailed in Ekici and Peterson (2009), the survey instrument was parallel translated into Turkish (from English) by a professional translation company in Turkey using both native English and native Turkish speakers. Through a combination of quota sampling and judgment sampling in four Turkish cities, a generally representative sample of 318 usable surveys (n = 318) was collected.

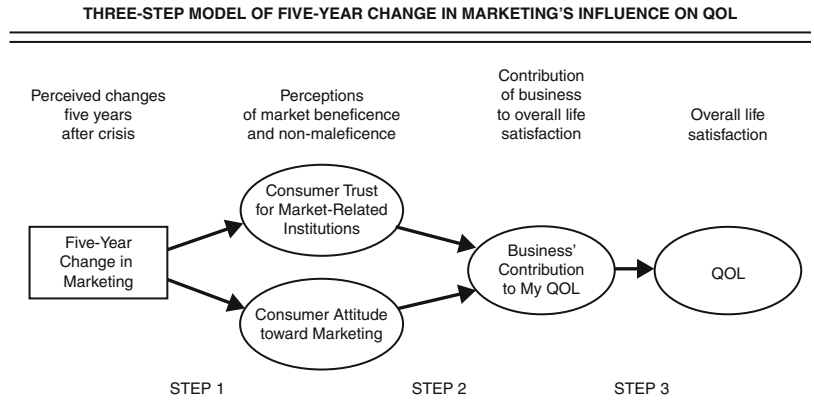
Results and Model Validity

Covariance analysis using AMOS 7 was used to evaluate the factor structure of the 36 items in a confirmatory factor analysis with the initial group of 318 and then to test the proposed three-step model. The model posted a chi-square value of 903.6 with 581 df. Comparative fit indicators suggested a good fit (CFI = .94; RMSEA = .04) (Bentler, 1990). As such, fit indices and the confirmatory factor analysis suggested a high degree of model fit. Importantly, all the structural coefficients in the model were statistically significant at $\alpha = .05$. The final model for the group below the poverty line (n = 132) posted a chi-square value of 868.8 with 581 df. Comparative fit indicators suggested an acceptable fit for the model (CFI = .89; RMSEA =.06). The final model for the group above the poverty line (n = 132) posted a chi-square value of 811.4 with 581 df. Comparative fit indicators suggested a good fit for the model (CFI = .90; RMSEA = .06) (Bentler, 1990).

The study also compared models for the financially constrained (poor) group and the nonfinancially constrained (nonpoor). Notably, a comparison of the model results for poor and the model results for nonpoor revealed that the mediating role for BCM-QOL between CTMRI and QOL was statistically significant at $\alpha = .05$ in the group below the poverty line – but was not significant in the group above the poverty line. (The standardized path coefficient between CTMRI and BCM-QOL was .55 for the group below the poverty line and −.06 for the group above the poverty line). Conversely, the mediating role for BCM-QOL between CATM and QOL was statistically significant at $\alpha = .05$ in the group above the poverty line – but was not in the group below the poverty line. (The standardized path coefficient between CATM and BCM-QOL was .66 for the group below the poverty line and −.01 for the group above the poverty line). All the other loadings were statistically significant and generally similar across the two models.

Discussion of the Three-Step Model

Figure 1 depicts the three-step model. In the first step of the model, the improvements in marketing over the last five years contributed directly to trust for market-related institutions and one's current attitude toward marketing. Attitude toward the 5-Year Change in Marketing posted a positive and moderately sized influence on CTMRI (standardized path coefficient of .41) and a positive and large-sized influence on CATM (standardized path coefficient of .73). In the next step of the model, trust and attitude toward the market influenced one's view about what business contributes to QOL. CTMRI and CATM had positive and moderately sized



Consumer Well-Being, Consumer Sentiment, Fig. 1 Three-step model of 5-year change in marketing's influence on QOL

influences on BCM-QOL (standardized path coefficients of .23 and .31, respectively). In the third and final step of the model, what businesses contribute to one's own QOL influenced overall life satisfaction (QOL). BCM-QOL positively influenced one's overall life satisfaction (QOL) (standardized path coefficient of .31).

With respect to potential differences between the poor and the nonpoor in a developing country, the results suggested that steps 1 and 3 in the three-step model were generally the same. However, the relationships comprising step 2 in the model between CTMRI and BCM-QOL and between CATM and BCM-QOL differed in the study. The poor had a positive and statistically significant relationship at the .05 level between CTMRI and BCM-QOL but had no such relationship between CATM and BCM-QOL. In other words, CTMRI (and CATM) mediated the relationship between Attitude toward 5-Year Change in Marketing and judgments about business' contributions to one's own QOL. By comparison, the nonpoor emphasized CATM (and not CTMRI) as a mediator of Attitude toward 5-Year Change in Marketing and judgments about business' contributions to one's own QOL.

Contributions to QOL Research

The 2010 study by Peterson et al. incorporated an exogenous measure of 5-year changes in marketing. By doing so, the researchers were able to test a causal model of how marketing management practices influence quality of life perceptions through consumer sentiment. The causal model of this study provided a more accurate reflection than correlational models of the influence of marketing practices on perceptions of business' contribution to overall quality of life. The findings suggest that consumers living below the poverty line in a developing country differ in how they perceive business contributes to their quality of life from consumers living above the poverty line. This is consistent with the notion that heterogeneity in consumer needs and perceptions marks even poor populations (Kotler, Roberto, & Leisner, 2006). Additionally, this study included intersubjective assessments of consumer sentiment and well-being (CTMRI representing what consumers trust about market-related institutions and CATM representing consumer judgments about marketing practices in the marketplace). In this way, the study presented a more complete picture of well-being for consumers in a developing country.

Further Research on Consumer Sentiment and Well-Being

While methodologically rigorous in their construction and backed by extant theory, the standardized consumer sentiment measures discussed (CATM, CTMRI, and BCM-QOL) are still in a nascent form that requires further research to clarify the validity and reliability of the measures across settings and segments of

the consumer population. Consequently, studies that apply the three-step model approach elicited by Peterson et al. (2010) to alternative settings including other developing countries (Asia, Africa, Latin America, etc.), developed countries, and subnational settings would be of great merit in advancing understanding of the relationship between consumer sentiment and QOL as well as testing the generalizability of CATM, CTMRI, and BCM-QOL. Equally, further research that investigates the individual constructs of CATM, CTMRI, and BCM-QOL in varied consumer segments would increase understanding of the cross-setting validity of the three constructs. Aspart of the reemergence of transformative consumer research, studies that evaluate the varying interactions and mediations between consumer sentiment and overall QOL through the lens of consumer vulnerability (the poor, the disabled, the displaced) would illuminate conceptual relationships that have the potential to transform consumer well-being (Baker & Mason, 2012; Baker, Rittenburg, & Gentry, 2005). Finally, the development of additional or comprehensive consumer sentiment measures that offer a more complete representation of consumer well-being across contexts will only enhance the possibilities for theoretical and applied progress in QOL research.

Cross-References

- ▶ Consumer Confidence Index
- ▶ Consumer Well-being
- ▶ Consumer Well-being, Consumer Complaints
- ▶ Consumer Well-being, Shopping Satisfaction
- ▶ Subjective Well-being (SWB)

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Consumer Well-Being, Consumption Life Cycle

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Synonyms

Consumer Quality of Life; Consumption Life-cycle Model

Definition

The consumption process model of consumer well-being posits that consumer well-being is conceptualized in terms of the entire consumption process – acquisition, possession, consumption, maintenance, and disposition as consumers experience satisfaction and dissatisfaction across the entire consumption processes. This model expands the *acquisition-possession* dichotomy, adding *consumption*, *maintenance*, *and disposition* dimensions to more fully reflect the range of consumer experiences with goods and services.

Description

Marketing influences consumers' quality of life in large part because it affects satisfaction in the consumer life domain (Day, 1987; Leelakulthanit, Day, & Walters, 1991). Previous studies have estimated consumer well-being by measuring satisfaction with possessions (e.g., Nakano, MacDonald, & Douthitt, 1995) and satisfaction with retail institutions (e.g., Meadow 1983). These one- and two-factor conceptualizations of consumer well-being oversimplify the concept because they fail to capture the broad scope of the concept. We argue that consumer well-being needs to be conceptualized in terms of a broader scope of consumption-related experiences from acquisition through consumption to disposal (e.g., Hsee, Yang, Li, & Shen, 2009; Lee, Sirgy, Larsen, & Wright, 2002; Wilkie & Moore, 1999). In this chapter, we will examine the relationship between consumption life cycle and consumer well-being.

The Acquisition Model of Consumer Well-Being

The acquisition model posits that consumer well-being is determined by satisfaction with acquisition of consumer goods and services. This model is based on the notion of satisfaction hierarchy in that consumer's acquisition satisfaction in purchasing various products has a positive influence on overall life satisfaction (Andrews & Withey, 1976; Meadow 1983). Acquisition satisfaction will be determined by price affordability, satisfying interactions, number of available alternatives, and among others (Baker, Levy, & Grewal 1992; Grewal & Sharma, 1991; Zhang & Fitzsimons, 1999). Through these satisfying acquisition experiences, consumers will get satisfaction of higher-order needs as well as lower-order needs (Rucker & Galinsky, 2008). It should be noted that providing too many alternatives can have a negative impact on consumer well-being because it can create information overload and consumer regret (Markus & Schwartz, 2010).

The Possession Model of Consumer Well-Being

The possession model posits that consumer well-being is determined by consumers' satisfaction with their material possessions and standard of living (Nakano et al., 1995). Material possession provides consumers with satisfaction of consumption needs. Studies found a significant relationship between possession satisfaction and life satisfaction, especially for older and low-income people (Leelakulthanit et al., 1991). The relationship between possession satisfaction and life satisfaction varies depending on the economic status of the respondents (Diener & Biswas-Diener, 2002).

The Two-Factor Model of Consumer Well-Being

The two-factor model of consumer well-being conceptualize consumer well-being in terms of

acquisition and *possession* of consumer goods and services (Day, 1987; Leelakulthanit et al., 1991). Acquisition satisfaction refers to satisfaction with purchase of consumer goods and service while possession satisfaction refers to satisfaction with the ownership of consumer goods (Day, 1987; Lee et al., 2002). Materialistic people allow material possessions to play a central role in their lives (Richins, 2011; Sirgy, Lee, Larsen, & Wright, 1998). High materialism can have a negative impact on consumer well-being since materialistic people have unrealistically high expectations (Burroughs & Rindfleisch, 2002; Hsee et al., 2009; Richins, 2011; Richins & Dawson, 1992).

The Consumption Process Model of Consumer Well-Being

The consumption process model posits that consumer well-being is conceptualized in terms of the entire consumption process – acquisition, possession, consumption, maintenance, and disposition (Lee et al., 2002; Sirgy et al., 2008) – because there is much evidence that consumers experience satisfaction and dissatisfaction across the entire consumption processes and that consumer satisfaction spills over onto other life domains affecting subjective well-being (e.g., Lee & Sirgy, 1995; Wilkie & Moore, 1999). This model expands the *acquisition-possession* dichotomy, adding *consumption*, *maintenance*, *and disposition* dimensions to more fully reflect the range of consumer experiences with goods and services.

Acquisition Satisfaction is defined as satisfaction with respect to shopping and other activities involved in the purchase of consumer goods and service including quality, prices, hours, and services of stores in the local area (Day, 1987). *Possession satisfaction* is satisfaction that results from the ownership of consumer goods, and it is measured by six single-item indicators that tap satisfaction with major classes of possessions, e.g., house or condominium, consumer electronics, and private transportation (Lee et al., 2002). *Consumption satisfaction is satisfaction* resulting from the use of goods and services. It is closely related to but distinct from possession satisfaction, the difference being that possession satisfaction focuses on positive affect that flows from ownership per se whereas consumption satisfaction focuses on satisfaction that flows from the actual use or *consumption* of the product. Consumption satisfaction can be measured for major categories of consumer goods and services that may enhance quality of life, e.g., health-care services, banking/insurance services, and consumer electronics (Kleine, Kleine, & Kernan, 1992; Lee & Sirgy, 1995; Sirgy, Hansen, & Littlefield, 1994). It has been found that consumer well-being from acquisition satisfaction is relative while consumer well-being from consumption is absolute (Hsee et al., 2009). *Maintenance satisfaction* is satisfaction consumers experience when they seek to have a possession repaired or serviced (Lee et al., 2002; Lee & Sirgy, 1995). Maintenance satisfaction is conceptualized in relation to repair services and do-it-yourself support services. *Disposition satisfaction is* degree of satisfaction consumers feel with the disposability of their products, i.e., with the convenience and ease of disposal and the environmental friendliness of the product at the time of disposal. Disposition satisfaction increases consumer well-being since it increases satisfaction of societal needs through the sustainable consumption behaviors (Pieter, 1991; Prothero et al., 2011). Disposition satisfaction from a special possession increases consumer well-being (Price, Arnould, & Curasi, 2000).

Marketing affects consumer well-being throughout the consumption process. In order to effectively market products in ways to enhance and preserve consumer well-being, it is important for marketers to examine and measure the totality of consumption experiences by the products. The consumption process CWB measure will help policy makers and marketers identify areas of improvement for consumer well-being and develop appropriate marketing strategies to enhance CWB.

Cross-References

▶ Consumer Quality of Life
▶ Possession Satisfaction

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Consumer Well-Being, Globalization

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Definition

The impact of globalization on ▶ consumer well-being is a matter of popular and academic

debate (e.g., Friedman, 2005; Held & McGrew, 2007; Helliwell, 2002; Stiglitz, 2006). Globalization generally refers to a multidimensional process whereby markets, firms, production, and financial systems are integrated on a global scale (Brawley, 2003). Whether this phenomenon improves the overall satisfaction of consumption needs is not clear. However, it is clear that certain groups and individuals have improved consumer well-being as the result of globalization, but whether the benefits of globalization extend to all consumers is the crux of the debate.

Description

Globalization is a complicated concept, so generally quality of life research examines the impact of a subset of the phenomena. Castell's (1996, p. 102) definition of globalization as the widespread perception that the world is rapidly being molded into a shared social space because its "core components have the institutional, organizational, and technological capacity to work as a unit in real time, or in chosen time, on a planetary scale" highlights the breadth of the concept. Five factors, that are often examined individually, are contributing to the increased integration including (1) the globalization of business through trade, finance, and multinational organizations, (2) increased interaction with other cultures, (3) cultural homogenization, (4) a growing web of treaties and institutions, and (5) problems taking on worldwide proportions. Technology, new organizational forms, and the spread of Van Hayekian free markets are perceived as stimulants to these global trends.

As an example of globalization being framed in subsets, in an early QOL work that included the impact of globalization on consumer well-being, Sirgy, Lee, Miller, and Littlefield (2004, p. 253) bracketed their definition of globalization as "the diffusion of goods, services, and capital, technology, and people (workers) across national borders." In a later research, the model was further refined to examine just the free flow of goods and service (Sirgy, Lee, Miller, & Littlefield, 2007). Both theoretical articles speculated that globalization as defined had mixed impact on CWB.

There are three schools of thought on the impact of globalization on consumer well-being: (1) it improves overall consumer well-being, (2) it hurts overall consumer well-being, and (3) it is overrated. The neoliberal school maintains that if the world embraced free markets that consumers would have better choices, lower prices, and more ability to consume thereby increasing their CWB (Bhagwati, 2004; Sachs, 2005). The opposing argument is that globalization increases inequality and increases the power of corporations over consumers that results in poor quality or unsafe consumption and reduction of the ability of many to consume (Klein, 2007; Wallach & Woodall, 2004). The third perspective is that the impact of globalization is overestimated. Krugman (1996) argues that technology and not globalization is the main cause of the decline of most American's ability to consume and the country's rising wage inequality. Others use the term "globaloney" and note that national boundaries still matter and that of the indicators typically used to measure globalization (e.g., trade, investment, immigration, web traffic, phone calls), around 90 % of these activities are still conducted within national boundaries (Ghemawat, 2007). To address these opposing perspectives, researchers often acknowledge the contradictory nature of globalization and take a dialectic approach that specifies various pathways on which the factors of globalization impact well-being (Tsai, 2007).

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Consumer Well-Being, Materialism

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Synonyms

Material Value Scale (MVS)

Definition

Material Value Scale, developed by Richins and Dawson (1992), is a multidimensional scale measuring the importance of material possessions (acquisition centrality dimension) and related beliefs (happiness and success dimensions).

Description

Materialism, the belief that material objects and their acquisitions are important and valuable, has negative impact on consumers' quality of life (e.g., Burroughs and Rindfeisch 2002). Accordingly, materialism (and its antecedents and consequences) has been studied in the marketing literature extensively. Although several researchers attempted to develop scales to measure materialism (e.g., Belk, 1984), the Material Value Scale (MVS) has been the standard measure of materialism in marketing and consumer research.

Material Value Scale (MVS)

Richins and Dawson (1992, p. 307) conceptualized materialism as a value and proposed that materialistic people "value possessions and their acquisition more highly than most other matters and activities in life." Their measure captures this value through the dimension "acquisition centrality" and related beliefs including "happiness" and "success." *Acquisition centrality* refers to the importance of possessions and their acquisitions for people. In a way, this dimension measures the extent to which people place much emphasis on possessions: people high on acquisition centrality are more materialistic than people who are low on acquisition centrality. The *happiness* dimension refers to the belief that possessions and their acquisitions bring happiness to people's lives and the *success* dimension refers to the notion that materialistic people "judge their own and others' success by the number and quality of possessions accumulated" (Richins & Dawson, 1992, p. 304). In other words, people acquire possessions to view themselves successful and to impress others by their success. Therefore, while acquisition centrality measures the extent of materialism, the happiness and success domains measure the reasons (or motives) to value possessions, hence, to become materialistic.

The original MVS was composed of 18 items (seven items for the acquisition centrality dimension, five items for the happiness dimension, and six items for the success dimension). Richins (2004), however, replaced the 18-item scale by the 15-item scale and also recommended using the short (9-item) form of the MVS.

The scale items from the 15-item form are as follows (items retained in the short form are identified in parentheses):

Acquisition Centrality
- I usually buy only the things I need. (Reversed)
- I try to keep my life simple, as far as possessions are concerned. (Reversed; 9 items)
- The things I own aren't all that important to me. (Reversed)
- I enjoy spending money on things that aren't practical.
- Buying things gives me a lot of pleasure. (9 items)
- I like a lot of luxury in my life. (9 items)
- I put less emphasis on material things than most people I know. (Reversed)

Happiness
- I have all the things I really need to enjoy life. (Reversed)
- My life would be better if I owned certain things I don't have. (9 items)
- I wouldn't be any happier if I owned nicer things. (Reversed)
- I'd be happier if I could afford to buy more things. (9 items)
- It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like. (9 items)

Success
- I admire people who own expensive homes, cars, and clothes. (9 items)
- Some of the most important achievements in life include acquiring material possessions.
- I don't place much emphasis on the amount of material objects people own as a sign of success. (Reversed)
- The things I own say a lot about how well I'm doing in life. (9 items)
- I like to own things that impress people. (9 items)
- I don't pay much attention to the material objects other people own. (Reversed)

Dimensionality

In the original scale development paper, Richins and Dawson (1992) provided support for a three-factor model. However, in a more extensive study employing 15 separate data sets, Richins (2004) found mixed support for a second-order three-factor model based on the original 18 items and, instead, found better results for shortened versions of the MVS. Roberts, Tanner, and Manolis (2005) compared the first-order model with the second-order model and concluded that the second-order model with three dimensions provided a better fit to the data. Further highlighting mixed findings, Ahuvia and Wong (2002) provided support for the first-order three-dimension model in contrast to Kilbourne, Grunhagen, and Foley (2005) who in testing measurement invariance across three countries (USA, Germany, and Canada) provided evidence for an invariant second-order model.

Reliability

Table 1 reveals coefficient alpha estimates for the three MVS dimensions (and the combined scale) from an identified set of studies. As can be seen from the table, most studies conducted in the United States reported relatively high reliability measures, though reliability estimates were higher for the combined scale than they were for individual dimensions. Some of the researchers had to modify the scale by removing items that did not work well for their sample (Kilbourne et al., 2005; Roberts et al., 2005); not using the same items across different studies, however, limits the comparability and generalizability of results obtained therein. Moreover, as revealed in Table 1, lower reliability estimates were obtained in countries other than the United States. Other estimates of internal consistency (i.e., average variance extracted and composite reliability) are not reported in the original studies (Richins & Dawson, 1992; Richins, 2004) and are reported in only a few of the other identified studies. For instance, using only three items from the happiness dimension, Bruner and Kumar (2007) obtained .62 for the average variance explained (AVE), and Shrum, Burroughs, and Rindfleisch (2005) reported

Consumer Well-Being, Materialism, Table 1 Coefficient alpha estimates for the material value scale (Richins & Dawson, 1992)

Source	Centrality	Happiness	Success	Combined materialism scale	Country
Richins and Dawson (1992; 18-item)	0.71–0.75	0.74–0.78	0.73–0.83	0.80–0.88	USA
Ahuvia and Wong (2002; 18-item)	0.74	0.76	0.73	0.82	USA
Richins (2004) (mean values)					
18-item	0.72	0.78	0.77	0.86	USA
15-item	0.67	0.78	0.76	0.86	USA
9-item	–	–	–	0.82	USA
6-item	–	–	–	0.75	USA
3-item	–	–	–	0.63	USA
Kilbourne et al. (2005; 9 items)	0.67	0.70	0.67	–	USA, Germany, Canada (pooled sample)
Roberts et al. (2005; 11 items)	0.67	0.72	0.68	0.73	USA
Furnham and Valgeirsson (2007; 18-item)	0.61–0.75	0.61–0.75	0.61–0.75	–	United Kingdom
Ridgway, Kukar-Kinney, and Monroe (2008; 9-item)	–	–	–	0.86	USA
	–	–	–	0.86	Canada
	–	–	–	0.79	Mexico
	–	–	–	0.84	Greece
Cleveland, Laroche, and Papadopoulos (2009; 7 items)	–	–	–	0.71	Korea
	–	–	–	0.79	Hungary
	–	–	–	0.74	India
	–	–	–	0.82	Chile
	–	–	–	0.88	Sweden

composite reliability of .92 for the 15-item combined scale.

Test-retest reliability based on three-week interval was calculated for the original 18-item MVS by Richins and Dawson (1992). The reliability correlations were .82 for the acquisition centrality dimension, .86 for the happiness dimension, .82 for the success dimension, and .87 for the combined scale.

Validity

Scale validity has been tested by examining the relationship between the overall materialism scale and other theoretical constructs. For instance, Richins and Dawson (1992) showed that materialistic people are more likely to feel they need more income, value financial security, spend money on themselves, and be self-centered and less likely to value warm relationships with others, contribute to charitable organizations, be satisfied with their income or standard of living, and be satisfied with their life as a whole.

Other researchers also found (by using the MVS) that materialistic people are less satisfied with different aspects of life and with life as a whole (Arnold, Randy, & Wood, 2010), are less optimistic (Bruner & Kumar, 2007), and are more likely to exhibit compulsive buying tendency (Ridgway et al., 2008), among others.

Discussion

Several researchers discussed the deficiencies of the MVS. For instance, Wong (1997, p. 80) revealed across five countries that the mixed-worded nature of the MVS (i.e., the reversed items) confounded its cross-cultural validity

because "the dimensional structure of the MVS lacked configural invariance." With respect to the negative relationship between materialism and life satisfaction, Larsen et al. (1999) argued that the empirical findings may be an artifact of the MVS. MVS items coded positive for materialism begin: "My life would be better if . . .," "It sometimes bothers me quite a bit that . . .," and "I'd be happier if . . .." The phrasing of these items point to the fact that life satisfaction is implicit in the items coded negative for materialism while life dissatisfaction is implicit in the items coded positive. The authors conclude that in the MVS, "the core meaning of materialism-a high valuation of material things-has been confounded with a tendency to experience negative emotions" (Larsen et al. 1999, p. 79). Moreover, as Table 1 shows, the MVS exhibits low levels of reliability for its sub-domains, specifically in countries other than the United States.

Despite these shortcomings, however, the MVS continues to be the most widely adopted measure of materialism in consumer research and marketing.

Cross-References

▶ Materialism

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Consumer Well-Being, Shopping Satisfaction

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Synonyms

Shopping life; Shopping satisfaction; Shopping well-being

Definition

Shopping satisfaction or shopping well-being (at the mall) is a shopper's perceived impact of a shopping mall in contributing to satisfaction in important life domains resulting in a global judgment that the mall contributes significantly to one's overall quality of life. Particularly, shopping well-being involves a sense of well-being in four key life domains: consumer life, social life, leisure life, and community life.

Description

Does Shopping Positively Impact People's Sense of Well-Being?

A great deal of research shows the adverse quality of life effects of compulsive shopping (e.g., Roberts, Manolis, & Tanner, 2003). That is, compulsive shopping focuses on the negative quality of life effects of shopping addiction. However, this research stream should not be confounded with the research on shopping well-being. Shopping well-being focuses instead on the positive quality of life effects of shopping.

Focusing on the positive effects of shopping on people lives, the marketing literature and quality of life studies support the view that shopping contributes significantly to people's quality of life. In fact, in addition to its contribution in the satisfaction of human basic needs (i.e., acquisition of goods and services), shopping has been considered fulfilling of three fundamental human needs: autonomy, competence, and relating *to others* (Tauber, 1972). Satisfaction of these needs plays an important role in overall ▶ subjective well-being or ▶ happiness (Deci & Ryan, 2002). Moreover, satisfaction with shopping in one's local area has been shown to play a positive and significant role in ▶ life satisfaction (e.g., Lee, Sirgy, Larsen, & Wright, 2002; Sirgy & Lee, 2006).

In the marketing literature, there is much research related to shopping hedonic values (Babin, Darden, & Griffin, 1994), shopping enjoyment (Beatty & Ferrell, 1998), shopping excitement (Wakefield & Baker, 1998), and shopping delight (Oliver, Rust, & Varki, 1997). This research stream in marketing implicitly supports the notion that indeed shopping contributes positively to people's sense of well-being. Recently, El Hedhli, Chebat, and Sirgy (2011), in their article published in the *Journal of Business Research*, have introduced the concept of "shopping well-being at the mall" to explicitly highlight the positive impact of shopping on people's sense of well-being.

What Is Shopping Well-Being?

Shopping well-being is a shopper's perceived impact of a shopping mall in contributing to satisfaction in important life domains (such as consumer life, social life, leisure life, community life) resulting in a global judgment that the mall contributes significantly to one's overall quality of life (El Hedhli et al., 2011). The concept of shopping well-being has been built upon the concept of ▶ consumer well-being.

Consumer well-being refers to consumer satisfaction with the various consumer life domains and subdomains (e.g., Lee & Sirgy, 1995; Leelakulthanit, Day, & Walters, 1991; Sirgy & Lee, 2006). That is, the concept of consumer well-being is defined at a macrolevel across a variety of marketplace experiences in the context of the consumer's local area of shopping. Specifically, consumer well-being captures consumer satisfaction with the entire consumption process from acquisition through consumption to disposal of a variety of consumer goods and services in a local marketplace – purchase, preparation, consumption, possession, maintenance, and disposal of goods and services (Lee et al., 2002; Sirgy & Lee, 2006).

Particularly, the study of El Hedhli et al. (2011) focuses on one of the consumer life subdomains, namely, shopping life (i.e., experiences related to product acquisition). Within that subdomain of shopping life are affective experiences related to shopping malls. El Hedhli et al. (2011) argue that the mall shopping experience covers a wide array of experiences such as purchase of consumer goods and services, entertainment, and socialization with other shoppers. That is, shopping in a mall may contribute to the satisfaction of a variety of human developmental needs (i.e., economic, social, esteem, aesthetic needs). Life satisfaction, subjective well-being,

or an overall sense of well-being is enhanced with the satisfaction of the full spectrum of human developmental needs (Diener, 1984; Sirgy, 2002). Accordingly, El Hedhli et al. (2011) argue that the extent to which a shopper is satisfied with his/her cumulative mall shopping experiences translates literally into a sense of well-being or life satisfaction.

Particularly, shopping in a mall may contribute to life satisfaction through four key life domains: (1) consumer life, (2) social life, (3) leisure life, and (4) community life. A shopping mall can contribute significantly to consumer well-being by providing shoppers with an assortment of stores that carry much needed goods and services. A shopping mall can contribute significantly to social well-being by providing shoppers a venue that allows them to gather with other people such as friends and relatives to interact and socialize. A shopping mall can contribute significantly to leisure well-being by providing shoppers an entertainment venue. Finally, a shopping mall can contribute significantly to community well-being by providing a meeting place for community residents to assemble, socialize, and experience a sense of community.

Enhancing well-being in the consumer, social, leisure, and community life domains serves to increase overall life satisfaction. How? One possible explanation is the bottom-up spillover theory (see Diener, Suh, Lucas, & Smith, 1999 for literature reviews). That is, emotions and feelings experienced by specific events related to shopping at a mall may contribute to an overall sense of well-being in specific life domains (e.g., consumer life, social life, leisure life, and community life), which, in turn, spills over to the most abstract life domain at large, namely, overall life, thus influencing judgments of life satisfaction or overall happiness (e.g., Andrews & Withey, 1976).

It is important to note that the concept of shopping well-being does not imply satisfaction with the shopping experience or the mall per se (i.e., satisfaction with parking, stores, products, services) but the extent to which the shopping experience in a mall contributes to one's perceived quality of life. In other words, shopping well-being captures states of life satisfaction shoppers experience related to their cumulative shopping experiences at a mall. Furthermore, the concept of shopping well-being is quite different from here-and-now affect concepts such as shopping enjoyment and/or other shopping-related affect measures (e.g., Babin et al., 1994; Beatty & Ferrell, 1998; Oliver et al., 1997; Wakefield & Baker, 1998). These constructs capture merely instant, transient, static feelings of satisfaction shoppers may experience during a shopping visit. However, they do not capture the dynamic long-lasting impact of shopping on one's overall sense of well-being.

The Shopping Well-Being Scale

Shopping well-being was measured as follows. Respondents were prompted by the following question: "Does shopping at (mall name) contribute to your quality of life?" Then respondents were presented with four 7-point differential scales measuring four items: "this mall does not satisfy/satisfies my overall shopping needs"; "this mall does not play a role/plays a role in my social well-being"; "this mall does not play a role/plays a very important role in my leisure well-being"; "this mall does not play a role/plays an important role in enhancing the quality of life in my community." Psychometric tests supported the reliability and the validity of the shopping well-being construct.

Cross-References

- ▶ Consumer Well-Being
- ▶ Happiness
- ▶ Life Satisfaction
- ▶ Subjective Well-Being

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Consumption

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Synonyms

Expenditure; Purchase; Use; Wealth

Definition

Consumption encompasses the selection, acquisition, use, maintenance, repair, and disposal of any physical item or service (Campbell, 1995). It refers to the stages people's relationship with a good or service goes through from the time it becomes an object of desire until it is discarded by the user. In general, research on *subjective well-being (SWB)* studies the relationship between SWB measures, such as *happiness*,*satisfaction with life*, and/or domains of life, and consumption, using *income*, expenditure, or *wealth* as proxies.

Description

Since the emergence of neoclassical economics in the early twentieth century, consumption has been addressed as an activity with positive effects on people's well-being. More consumption of food, ▶ education, housing, ▶ leisure, clothing, and ▶ health care, for instance, are believed to have a positive impact on well-being regardless of the amounts consumed and the socio-environmental implications of its consumption. However, four decades of ▶ subjective well-being (SWB) studies indicate that, even in poor countries, more consumption might not have the positive effect predicted by neoclassical economics. The evidence about decreasing and even negative returns of consumption on SWB, the current ecological crisis, and the importance of social comparison call for caution when generalizing about the positive relationship between people's consumption and their quality of life.

A general finding in SWB research is the strong positive correlation between ▶ economic growth and SWB in ▶ developing countries and the small or negligible correlation found in rich societies (Layard, 2005). This is commonly explained by the fact that the poor are consuming to meet ▶ basic needs. As Veenhoven (1991) argues, when human needs are satisfied, people feel good and tend to give a positive appraisal of their life. The reason for this is that ▶ human needs, as opposed to wants, are directly related to ▶ happiness as the functionings that satisfy basic

needs are so vital that evolution makes sure they will be fulfilled by generating positive emotions (Veenhoven, 2000). Cross-country and within-country studies support this assumption. Research including indicators of basic needs finds that they are always positively and significantly related to subjective well-being, both in rich and in poor countries (Diener, Diener, & Diener, 1995; Guillén-Royo & Velazco, 2006). However, consumption of basic goods and services is not always linked to satisfying basic needs, even in poor countries. There are many reasons why poor people consume. These range from satisfying basic needs, achieving ▶ social integration, improving status, and following customs and traditions to having a good time. Not all of them are positively associated to happiness. In a study of seven poor Peruvian communities, Guillen-Royo (2008) found that consumption of priority items motivated by having fun and/or aesthetical ▶ pleasure was positively related to happiness, while spending on education, clothes, and housing to better integrate into society and/or to reach a higher status was not. Thus, consumption of basic items resulted in lower well-being when motivated by ▶ social interaction than when motivated by ▶ hedonism.

The small correlation found between growth and SWB in rich countries is often explained in terms of ▶ hedonic adaptation or the situation that occurs when the effects of higher consumption wear off after an initial period of increased pleasure. *Hedonic adaptation* clarifies why in modern societies, where consumption is targeted at the satisfaction of wants as opposed to needs, *consumerism* reigns. People have become "addicted" to material possessions and need increased amounts of them to maintain a certain level of well-being (Layard, 2005). This is illustrated by cross-country studies indicating that after a certain threshold more consumption has a negligible impact on well-being (Inglehart & Klingeman, 2000) and by studies showing evidence of reduced well-being after consumption increases (Frey & Stutzer, 2002; Jackson, 2008). An illustration of the latter is Jackson's (2008) study of consumer expenditure and reported life satisfaction across 27 European countries. He found that increased consumption of ▶ transport, leisure, and clothing was no longer adding to subjective well-being in Europe but was depleting life satisfaction. These findings are particularly relevant as they provide evidence against the popular neoclassical assumption that consumption contributes to a better quality of life.

The fact that in rich countries people have become addicted to material possessions links to the *values* and *aspirations* that have given consumption a central place in people's life. Twenty years of psychological research confirm that people pursuing financial success over goals not directly related to consumption experience lower well-being than those prioritizing nonmaterialist goals such as contributing to their community or having satisfying relationships with family and friends (Kasser, 2002). Moreover, psychologists suggest that the reasons why people choose to consume specific goods and services are also relevant for their quality of life, as those who do it for intrinsic motives (because they derive enjoyment out of it) are significantly happier than those motivated by external rewards (because they will have the admiration of others) (Kasser, 2002). Even in the developing world, materialist goals and extrinsic motives are behind a great deal of consumption choices (Guillen-Royo, 2008). The spread of capitalism, with its stress on material pursuits, self-interest, and competition, has turned contemporary consumption into a potentially detrimental activity for people's quality of life everywhere (Kasser, Cohn, Kanner, & Ryan, 2007).

The negative effects of consumption on quality of life are also noticeable through its environmental impact. Pollution and overexploitation of natural resources as a consequence of current production and consumption patterns are having irreversible effects on biodiversity and the climate, already acknowledged at the Rio Earth Summit in 1992. In addition to the long-term consequences of biodiversity loss and climate change, the short-term effects of increased pollution on water sources and the atmosphere, the changing rain patterns, and the increased frequency of drafts and floods are already depleting the quality of life of millions of people in the world (Stern, 2007). Less dramatic consequences of the current consumerist lifestyles in

rich countries include high levels of background noise, longer commutes, ▶ time stress, less contact with open and green spaces, and less ▶ physical activity, all of which have been shown to deplete people's psychophysical well-being (Frank, 1999; Newton, 2007). At the individual level, people whose consumption results in a high ▶ ecological footprint are found to be unhappier than those who lead a more frugal lifestyle (Brown & Kasser, 2005).

Finally, another of the classical findings in SWB research relates to the fact that within countries, the rich are always happier than the poor at any one point in time (Easterlin, 1974). A traditional explanation for the greater happiness of the rich is the pleasure they derive from consuming more than their fellow citizens. The explanation draws on Veblen's (1899) study of the consumption patterns of the American upper classes in the nineteenth century. He observed that the rich derived great pleasure from consuming conspicuously and observing the reaction their consumption had on their less economically advantaged acquaintances. Following Veblen's arguments, a vast amount of empirical work has addressed the importance of ▶ social comparison for SWB – particularly linked to studies showing a strong association between relative income (one's income compared to the income of one's *reference group*) and SWB both in rich and poor countries. A general finding is that as the consumption of the reference group increases, SWB decreases due to people's perceived pressure to catch up and to reach higher levels of consumption. However, recent research suggests that in some transition and developing countries, a higher consumption of the reference group might signal better economic possibilities for the future and thus contribute to SWB (Kingdon & Knight, 2007).

Conclusion

The goods people buy, use, reuse, and dispose of together with the services they consume have a direct impact on their quality of life. This is also the case for the values behind consumption choices and the aspirations people expect to fulfill with consumption. Empirical research on the linkages between consumption and SWB has challenged the initial assumptions of neoclassical economists regarding the positive effects of consumption on well-being. When consumption succeeds in satisfying basic universal needs, it has a direct and positive effect on people's quality of life. When consumption has a conspicuous element, even if it is linked to basic domains such as clothing and housing, it might lead to frustration if it does not succeed in giving them higher returns in terms of status or social integration. Additionally, consumption has been found to be an addictive activity as greater amounts of it are needed to keep a certain level of well-being in rich countries. This has contributed to *consumerism* with its harmful effects on the environment and on people's *subjective well-being*. In order for consumption to keep contributing positively to well-being, it should be reallocated to inconspicuous and nonmaterialist activities, like time with family and friends, exercising, leisure, and contributing to the community (Crompton & Kasser, 2009; Frank, 1999). More research is needed to investigate the practical implications for society of such reallocation.

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Consumption and Subjective Well-Being in Peru

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Synonyms

Latinobarometro; Peru income and expenditure survey; WeD resources and needs questionnaire (RANQ)

Description

Peru is a middle-income country in South America with relatively high poverty rates and great socioeconomic inequalities across regions and ethnic groups. Despite having experienced strong economic growth since the beginning of the twenty-first century, around 35 % of the Peruvian population still lives under the national poverty line; most of them concentrated in the jungle (46 %) and the Andean highlands (53 %) (Instituto Nacional de Estadística e Informática [INEI], 2010). Inequality, although slowly shrinking, remains high, with the top population quintile enjoying 55 % of total income and the lowest quintile getting a meager 4 % (Ortiz & Cummins, 2011). These imbalances are reflected in the large gap between the lifestyles of the rich and the poor; the rich hold modern and sophisticated consumption patterns while the poor struggle to make ends meet and aspire to emulate the patterns of wealthier groups (Schuldt, 2004).

The relationship between ▶ inequality, ▶ poverty, ▶ consumption, and subjective well-being (SWB) in Latin America and Peru has been addressed in several studies during the last decade. In general, research looking at inequality, both measured by the Gini coefficient (capturing the dispersion of income in the population) and through an indicator of relative income (household income relative to the income of a reference group), has shown consistent negative effects on people's ▶ happiness in Latin America (Graham & Felton, 2006; Rojas, 2008). For example, Gerstenblüth, Melgar, and Rossi (2010), using 2008 *Latinobarómetro* data for 18 Latin American countries found that intra-country inequality, measured by the Gini coefficient, reduced the probability of being happier with a larger income. Conversely, Rojas (2008) drawing on Gallup 2007 surveys in 19 Latin American countries showed that relative income played a greater role in explaining SWB than absolute income, as people's appreciation of life rises with their own income and decreases with the income of the reference group. Inequalities in Latin America have also been explored regarding the rural and

urban divide. It is consistently found that urban dwellers are unhappier and have a more pessimistic view about the evolution of their living standards than their rural counterparts (Graham & Pettinato, 2002; Graham & Felton, 2006).

In Peru, the effects of inequality, poverty, and consumption on SWB were studied from 2002 to 2007 by the ▶ Well-being in Developing Countries (WeD) research group at the University of Bath (UK). WeD, funded by the Economic and Social Research Council in the UK, investigated the cultural construction of well-being in Peru, Thailand, Ethiopia, and Bangladesh. In Peru, the study comprised seven communities running from the central Andean highlands to Lima, including a village in the cloud forest. The selection of the sites was not meant to be representative of the country. It sought to illustrate different degrees of urbanization (from rural hamlets to shanty towns), types of markets, geopolitical centrality, ethnicity, and language. The research included surveys, interviews, and ▶ focus groups at the individual and household levels.

In general, most participants were poor. Taking as a reference weighted and expenditure-based estimates, 67 % of participant households were under the extreme poverty line and 95 % were classified as poor (Copestake, Guillen-Royo, Chou, Hinks, & Velazco, 2007). Table 1 introduces the research sites, the consumption level, and the average global happiness of household heads participating in the first round of the WeD Income and Expenditure survey in 2005. It shows, among other things, that participants from the shanty town in Lima are the richest in the sample and the least happy.

The relationship between consumption and well-being using WeD data was explored in different studies drawing on the information from the WeD Resources and Needs Questionnaire (RANQ) and the Income and Expenditure survey (I&E) (Copestake, 2008; Guillen-Royo, 2008). The RANQ collected socioeconomic and demographic data from 1004 households in 2004, and the I&E captured, among other information, expenditure data from 251 households selected at random among RANQ participants in three rounds during 2005. Both surveys asked about happiness and adequacy of consumption domains, and most respondents were either household heads or spouses.

Regression analysis was used in most studies using WeD data to investigate the relationship between consumption and well-being through the effects on happiness of total consumption, relative consumption, and motives for consumption. Table 2 below summarizes the results of a regression analysis on happiness in three stages addressing the three types of variables just mentioned (for further details on the methodology, refer to Guillen-Royo, 2008). Model 1 accounts for the effect of consumption linked to ▶ basic needs through the intermediate needs deprivation index and total consumption through household expenditure per capita. The results show, as expected, that among poor Peruvians, low satisfaction of basic needs reduces happiness and more consumption increases it. Consuming more contributes to happiness at any level of basic needs satisfaction, which stresses the positive effect that consumption has on people's subjective well-being beyond provision for unmet needs.

Model 2 follows Graham and Felton's (2006) approach to the study of inequality in Latin America and estimates the effect of relative consumption by including in the analysis average expenditure and households' expenditure relative to the community average. The results in Table 2 indicate that having a richer reference group is negatively linked to happiness while being able to consume more than one's neighbors has a positive effect. On the one hand, as a community gets richer, people feel the pressure to keep up and consume more, which results in a lower sense of well-being. On the other hand, being richer than average implies being able to consume more quantity and better quality than poorer neighbors. This is related to a sense of achievement that poorer neighbors cannot enjoy resulting in greater happiness.

An additional study using the WeD data but analyzing adequacy of consumption domains instead of happiness shows that there are limits to the power of social comparison. Average consumption in the community reduces people's

Consumption and Subjective Well-Being in Peru, Table 1 WeD Peru research sites (Social Indicators Research, Vol. 89, 2008, pp. 535–555, Consumption and subjective well-being: exploring basic needs, social comparison, social integration and hedonism in Peru, Monica Guillen-Royo, Table 4. With kind permission from Springer Science and Business Media)

Name[a], altitude, and distance by road from Lima	Region, type, and population	Average household expenditure[b,c]	Average global happiness[b,d]
Llajta Iskay	Huancavelica	336	0.92
3,400 m	(rural – highlands)		
380 km	365		
Llajta Jock	Huancavelica	259	1.06
3,300 m	(rural – highlands)		
365 km	212		
Selva Manta	Jauja province of Junin	622	1.00
1,400–1,800 m	(rural – cloud forest)		
290 km	560		
Alegria	Huancavelica	414	1.12
3,000–3,500 m	(peri-urban highlands)		
355 km	5,440		
Descanso	Junin	503	0.93
3,275 m	(peri-urban highlands)		
290 km	5,323		
Progreso	Junin	501	1.02
3,275–3,325 m	(urban – highlands)		
310 km	1,560		
Nuevo Lugar	Lima	633	0.67
550–900 m	(urban – coast)		
35 km	150,000		

Source: Copestake, 2008; Guillen-Royo, 2008
[a]Names of the communities were anonymized by WeD
[b]Average household expenditure and happiness obtained from the first round of the WeD I&E survey
[c]Expenditure in nuevos soles (in July 2005, 1 Peruvian nuevo sol equalled 0.25451 euro)
[d]Means are calculated by using the following scores: "very happy" = 2, "fairly happy" = 1, and "not too happy" = 0

reported adequacy of housing, clothes, and children's education, but it does not influence participants' appraisal of families' health care and food consumption. The latter are two domains tightly related to physiological needs where the consumption of other people is of low importance. Moreover, a recent analysis of the effect of relative consumption in the urban and rural samples separately suggests that urban dwellers are more negatively affected by the level of consumption of their neighbors than are their rural counterparts. The diversity of goods and services available in Peruvian shanty towns compared to Andean communities informs people's aspirations and reduces their contentment with what they have (Guillen-Royo and Velazco, 2012).

Model 3 introduces to the analysis people's motives for consumption, using the results of an open-ended question asking about households' five current nonfood expenditure priorities and the motives for spending on them. Three basic groups of motives emerged after a content analysis of the responses. These were providing the household's basics (reported by 90 % participants), hedonism (11 %), and social interaction (50 %). The latter included expenditure motivated by relatedness, social positioning, social integration, and customs. As Table 2 illustrates, consuming motivated by social interaction and by the provision of household basics was negatively linked to happiness, while consuming in order to have an enjoyable experience contributed positively to subjective well-being.

Consumption and Subjective Well-Being in Peru, Table 2 Consumption and happiness in Peru (Social Indicators Research, Vol. 89, 2008, pp. 535–555, Consumption and subjective well-being: exploring basic needs, social comparison, social integration and hedonism in Peru, Monica Guillen-Royo, Table 4. With kind permission from Springer Science and Business Media)

	Model 1			Model 2			Model 3		
Independent variables	Coef.	z-score		Coef.	z-score		Coef.	z-score	
Sociodemographic characteristics									
Age	−0.121	−3.58	***	−0.117	−3.49	***	−0.124	−3.65	***
Age squared	0.001	3.46	***	0.001	3.38	***	0.001	3.55	***
Male dummy	0.347	2.31	**	0.323	2.15	**	0.306	2.02	**
Religion dummy (1 = catholic)	−0.092	−0.57		−0.201	−1.29		−0.193	−1.22	
Cohabiting dummy	0.550	2.76	***	0.599	3	***	0.705	3.45	***
Chronic illness dummy	−0.122	−0.65		−0.135	−0.73		−0.143	−0.76	
Self-employed dummy	0.214	1.35		0.171	1.07		0.124	0.77	
Homemaker dummy	0.342	1.74	*	0.306	1.55		0.197	0.98	
Basic needs									
Intermediate needs deprivation index	−0.075	−1.63	*	−0.102	−2.23	**	−0.117	−2.52	**
Consumption									
Log total expenditure	0.545	1.98	**						
Average expenditure				−0.015	−4.24	***	−0.015	−4.26	***
Relative expenditure				0.002	2.3	**	0.002	2.51	**
Motives for consumption									
Providing household basics dummy							−0.374	−2.28	**
Hedonism dummy							0.402	1.97	**
Social interaction dummy							−0.473	−3.61	***
Location									
Peri-urban dummy (urban = 0)	0.560	3.97	***						
Rural dummy (urban = 0)	0.596	3.16	***						
Low point of age	47			47			47		
/cut 1	−1.609			−5.174			−6.106		
/cut 2	0.604			−2.961			−3.807		
Number of observations	399			399			399		
Mc Fadden R-squared	0.075			0.077			0.107		
Log likelihood	−307.799			−307.070			−296.959		

Source: Guillen-Royo (2008)
Note: * significant at 10 % ** significant at 5 % ***significant at 1 %

In the context of the WeD sample in Peru, being largely motivated by the satisfaction of basic physiological needs in one's consumption captured poor people's frustration regarding their lack of access to suitable goods and services, together with the distress of not being able to cover for the family's basics. On the other hand, allowing oneself to spend on goods and services in order to have fun and/or aesthetical pleasure was a positive predictor of happiness. The latter result should be investigated further as it could well be that people predisposed to happiness are also more likely to spend on goods or services that give them joy.

Finally, the study examined the effect of consuming due to motives linked to social interaction. These appeared to be negatively related to happiness. A further analysis disaggregating social interaction into subcategories indicated that attempting to integrate into society through consumption and consuming to achieve a better social position were the reasons behind this negative effect. In the context of the Peruvian sample, consuming motivated by social integration represents the struggle of poor people to break the social stratification in the country. Furthermore, consuming to achieve a better social position identifies an extrinsic motivation that has often been associated with low subjective well-being (Kasser, 2002).

Further Research

The WeD data set has been very useful for exploring different aspects of consumption that influence well-being. However, issues such as the role of values and aspirations in defining people's consumption and their effect on well-being remain to be studied. An initial exploration has been done using data from the third round of the I&E survey which included a question about people's conceptual referents for happiness. Following Rojas' work in Mexico (Rojas, 2007), Guillen-Royo and Velazco (2012) analyzed the philosophical concepts that people in Peru associated with happiness and found that these were mainly linked to stoicism, virtue, and satisfaction. Rojas classified the first two conceptual referents as having an inner orientation and the third as depending on external conditions. This classification links with research on values and aspirations indicating that people who hold intrinsically oriented values like self-acceptance or affiliation are happier than those mobilized by extrinsic values such as social recognition or financial success (Kasser, 2002).

Contrary to the findings in psychological research on values, the analysis of the relationship between happiness and the three more popular referents indicated that people associating happiness with satisfaction were more likely to be happier than the ones linking happiness to stoicism or virtue. The latter was a concept more popular among the poor, who could not reach the levels of consumption of the rich and might have chosen to put up with their fate and build their lives around what was possible for them to achieve. Future research drawing on psychological approaches can further clarify the link between conceptual referents and values. This is likely to add to the current understanding of the relationship between consumption and well-being in such a diverse and unequal society as Peru.

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Consumption Externalities

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Synonyms

Competitive consumption; Easterlin paradox; Hedonic treadmill; Interdependent preferences; Invidious expenditure (or consumption); Keeping up with the Joneses; Rat race of consumption; Status seeking; Veblen effects; Veblen preferences

Definition

In the present context, consumption externalities are the (unpaid) social costs imposed on others through conspicuous consumption of goods, when these impacts have their effect purely through information about the choice and ability to consume, rather than from (material) side effects or by-products of consumption. That is, consumption externalities reflect the intrinsically social nature of the psychic benefits people derive through consumption.

See the Discussion for the broader context surrounding this term.

Description

In economics, consumption externalities exist when the ▶ consumption of others matters explicitly and directly in the utility function of individuals – that is, when people care intrinsically or are affected directly by knowledge about others' consumption. This is a natural expectation if our behavior has a status-seeking component or if our expectations, aspirations, or standards are set in part by what we see as normal or achievable. Nevertheless, such social interdependence is often assumed away in economic models of behavior and welfare, so the treatment of it arises as a special subject.

In the literature, the terms interdependent preferences, Veblen preferences, competitive consumption, and keeping (or catching) up with the Joneses have all been used to refer to consumption externalities of this kind, although the cross-citations between these terms are not always complete. This general idea has captured the imagination of economic theorists for many decades – indeed, it has always. Classically, early thinkers in economics recognized the social context of and motivations for consumption as well as the effects on others incurred by conspicuous consumption.

The concept appears to be steadily "rediscovered" by economists, presumably on account of being omitted (knowingly) in elementary textbooks by Marshall and then Samuelson, whose influence dominated in the first and second halves of the twentieth century, respectively. Already in 1950, Leibenstein laments that a recent work on the subject has overlooked treatments of consumption externalities by many classical economists, maybe most notably by Pigou in 1892 (Leibenstein, 1950).

Sociologists Rae (1834) and, garnering greater attention, Veblen (1899) expounded on the subject but even Rae (1834) attributes ideas concerning conspicuous consumption to much older texts. Indeed, earlier thinkers took such

human motivations and desires as given; for instance, Adam Smith, Karl Marx, and John Stuart Mill all took status and relative aspirations to be primary motives for economic consumption.

Theoretical Treatment of Consumption Externalities

Introspection is sufficient to invent a number of plausible forms of interdependence in preferences, and several categories have been discussed, modeled, and investigated econometrically.

Bandwagon, Snob, and Veblen Goods

Leibenstein (1950) outlined three classes of socially mediated components of demand for a good which do not relate to the function of the good itself. "Bandwagon effects" are positive consumption externalities in which a good becomes more valuable as a result of greater conspicuous consumption. "Snob effects" are the opposite, in which a good becomes less valuable as more others consume it. "Veblen effects" (after Veblen 1899) originally referred to goods for which high(er) prices are an intrinsically attractive feature (because conspicuously displaying the good can convey the price paid to others who recognize it); however, in the more recent literature "Veblen goods" and "Veblen effects" have come to refer to consumption reference levels and relativities more generally.

Jealousy, Admiration, the Joneses, and Upwards and Downwards Regard

Another categorization, articulated and investigated by Dupor and Liu (2003), formalizes "jealousy" as preferences in which an individual is worse off when others' consumption is higher, "admiration" as the opposite, and "keeping [sometimes "catching"] up with the Joneses" as the specific case in which an increase in others' consumption results in a substitution of allocated time from leisure towards labor. This idea reflects one of two features of the original allusion, the other being that preoccupation with the Joneses is evidence of an "upward-looking" reference level, in which consumption reference groups tend to be composed of the upper end of the consumption distribution. An alternative possibility is a "downward-looking" reference level, in which consuming above a low level is more important than attaining a high one. Empirical estimates of these kinds of asymmetries in the composition of reference groups have produced mixed results.

It is worth noting that consumption externalities need not be based on such competitive or cognitive motives as are framed by the concepts defined above. If human behavior and/or human satisfaction are merely sensitive to norm-setting and adjustable expectations, most of the above effects may obtain as emulation (i.e., doing or expecting to do whatever others do) rather than invidiousness (i.e., striving to attain or beat some standard or status).

Cardinal vs. Ordinal Effects

Theoretical studies of relative consumption effects typically must, in order to make analytic progress, make assumptions about the functional form in which others' consumption appears in the individual's utility, whether that describes a well-being function or a decision-making objective.

Some natural cases are those in which (1) the consumption reference level matters explicitly, for instance as a mean or median consumption level appearing in a difference or ratio with own consumption, and those in which (2) only pure status or rank position are of concern, without any further relationship to the cardinal difference between own and reference consumption.

In the latter case, several theoretical implications for the relationship between distributions of income, wealth, and well-being have been characterized, in particular by Ed Hopkins and Tatiana Kornienko (e.g., Hopkins & Kornienko, 2010, and references therein). For example, in the presence of negative consumption externalities society is generally made better off by larger disparities in endowments and by smaller disparities in rewards to effort. Theoretical models of economies populated by individuals concerned instead with the absolute difference or ratio of their consumption as compared with a mean consumption level have produced some similar,

but generally less sophisticated, findings. Both literatures emphasize the overall decline in well-being that can accompany increases in wealth or technological productivity, as everyone allocates more time to production and less to leisure.

Related Insights Evolutionary game theoretic arguments have been devised to explain the existence of both positive and negative consumption externalities as part of human character in group and individual settings. Also, some distinct insights in the literature relate to the existence of conspicuous leisure as well as conspicuous consumption.

Most of the discussion so far has related to consumption externalities which bear on others than the initial consumer, but it is reasonable to include also effects on the future self. That is, consumption reference levels may be set by past experience, as well as by the behavior of one's contemporaries. There is considerable evidence for such "adaptation" and efforts have been made to unpack it from status effects; a review can be found in Clark et al. (2008). Theoretically, this idea is related to habit formation, which has similarly been invoked to explain macroeconomic consumption and savings patterns.

Empirical Studies

Consumption externalities were first invoked to reconcile anomalies (from the point of view of "classical" predictions, i.e., without interdependent preferences) in consumption and savings behavior (Duesenberry, 1949). More recently, the anomalies have expanded to include, along with other macroeconomic parameters, measurements of ▶ subjective well-being (Easterlin, 1974). Indeed, the issue of consumption externalities has come to pose a major challenge for a fundamental premise in the discipline of economics – that increasing consumption choices increases welfare. This property does not scale simply from the individual to the social level if consumption externalities are in play and sufficiently strong, yet around the world economic growth has become a primary objective of public policies on the basis of it expanding consumption choices.

Meanwhile, the explosion of research as well as popular interest in the "Science of Happiness" or "Economics of Happiness" that has grown around the measurement of subjective reports of life quality also provides for the first time a measurable analogue to the welfare interpretation of utility in economic theory. The quantitative importance of consumption externalities in neutralizing any well-being gains from economic growth has therefore become an answerable empirical question.

Numerous studies find that increases in income produce increases in ▶ life satisfaction and ▶ happiness in individuals, as anticipated by standard economic theory. Moreover, cross-sectional differences in individual purchasing power across countries are remarkably powerful in accounting for differences subjective well-being. In light of the cross-sectional findings, the Easterlin paradox is the (contested) observation that as countries increase in per capita income over time, they are not becoming happier (Easterlin, 1974).

Clark et al. (2008) review the large and rapidly growing body of studies using longitudinal and cross-sectional subjective well-being data which assess, primarily within individual countries, the strength of relative income effects. Typically, findings are consistent with the hypothesis that negative consumption externalities (where consumption is usually proxied by income) at the local or regional level within a country, possibly combined with adaptation effects over time, are sufficient to fully negate the individual benefits of income increases.

Other empirical strategies include experimental investigation of choice, aspirations, and subjective well-being when subjects are faced with different comparison standards.

Formation and Adaptation of Reference Groups: Who, Where, and How Determined?

Most of the empirical work on how people actively choose their comparison standards or reference groups has been done by psychologists. These studies find that people can change both the strength and the target of their cognitive comparisons for reasons of strategic self-enhancement, goal-setting, or as part of a coping process. There has been limited economic

modeling of these kinds of strategic choices. However, it appears that projection bias may limit the realism of models in which decision makers are sophisticated in understanding the nature of consumption externalities. That is, experiments show there is evidence for people underestimating the effects of a change in their comparison group, even when they have a choice in the matter Loewenstein et al. (2003).

Discussion

In economics, externalities may be classified as acting through either consumption or production. In principle, an externality is any result of one individual's productive or consumptive actions which imposes uncompensated costs or benefits on another individual. In the discussion here, consumption externalities are effects which in theoretical models act directly on others' utility functions, which is to say that they affect others' well-being in a deep or intrinsic way. A central example of this kind of impact is the standard-setting effect, in which conspicuous consumption of a good (for instance, an expensive car) may shift others' aspirations or consumption reference level and thereby affect their well-being by changing the psychological benefit they receive from their own consumption of a related good (for instance, a less expensive car that was previously considered high status). In the economist's conceptual description, this externality acts directly in the utility function because it is in human nature to care explicitly about what others are consuming.

However, consumption may affect others' well-being through more circuitous pathways, and this has led to some confusion surrounding the term consumption externalities. Consuming cigarettes, which hurts others' health through secondhand smoke, or consuming an education, which helps others through productivity increases, are more usefully understood as production externalities. It is the secondhand smoke and the knowledge spillovers, respectively, which benefit others; it is not the choice, per se, of the original consumer that matters. Most environmental externalities are choices which fall into this category.

On the other hand, there are certain coordination problems (sometimes referred to as network externalities) which might be properly classified as consumption externalities because the effect is more tightly bound to the choice itself. For instance, selection of telecommunications systems or computer software may affect others by enabling coordination and communication through particular means. The choice by a doctor to prescribe a particular drug may send information to others about quality, acceptability, and the risk of malpractice suits of prescribing the same one. The implications for trade, taxation, and so on of these sorts of externalities may be well modeled by placing others' consumption for such goods right into the utility function. Just like the relative consumption effects of primary interest in this article, therefore, they sometimes appear in the literature also under the moniker of consumption externalities (e.g., Diamond & Mirrlees, 1973).

Instrumental Status Concerns

An alternate theory to the formulations described in this article deserves mention. To some degree humans' apparent interest in status and attention to relative consumption may be motivated, or could be modeled, by an instrumental concern rather than a direct or intrinsic one. That is, various non-positional goods with direct benefits may be allocated outside of the market in accordance with signals generated through (market) consumption. In such a description, people's interest in a fancy electronic device or exclusive watch may reflect only the extra, direct consumptive benefits that it will earn through achieving status, such as a better match in the marriage market or a higher paying job or increased bargaining power. For a discussion of this kind of investment in the context of relative consumption effects, see Postlewaite (1998).

Cross-References

▶ Consumption
▶ Easterlin Paradox

- ▶ Happiness
- ▶ Life Satisfaction
- ▶ Subjective Well-Being

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Consumption Life-Cycle Model

▶ Consumer Well-Being, Consumption Life Cycle

Consumption or Relative Deprivation and Financial Assets

▶ Family Income and Wealth

Consumption Taxes

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Synonyms

Value added tax

Definition

▶ Consumption taxes are usually indirect taxes levied on goods and paid by individuals by virtue of their association with these goods (Lipsey, 1993). They are taxes on spending on goods and services. These taxes are called sales taxes when they are levied on the sale of goods from retailer to consumer. A comprehensive tax of this sort on all transactions whether at the retail, wholesale, or manufacturer's level is called the value added tax. Consumption taxes on goods or services are included in the price paid by its final purchaser.

Consumption taxes decreases disposable income of households which means that the after-tax income that households have at their disposal to spend or to save is decreasing, lowering their total satisfaction and ▶ economic well-being.

Description

Taxes are of major importance in the pursuit of many governmental policies. Consumer maximizes his total ▶ utility or satisfaction from the spending of a limited income. The problem of the consumer is that he has only a limited amount of

income to spend and therefore cannot buy all the goods and services that would like to have (Pass & Lowes, 1993).

Consumption taxes may be levied in two basic ways:

(a) An ad valorem tax: a percentage of the value of the transaction on which it is levied
(b) A specific or per unit tax: a tax independent of its price such as taxes on cinema and theater tickets

The value a consumer places on a product is the maximum amount that would be willing to pay for it. The amount actually paid for it is its price. Consumer surplus is the difference between the value of a product and its price (Parkin & King, 1992). In other words, the consumers' surplus on each unit consumed is the difference between the market price and the maximum price the consumer would pay to obtain that unit (Lipsey, 1993). When consumption taxes are imposed or are increased, the resulting is a loss of consumer surplus.

Discussion

Consumption taxes refer to a taxing system where people are taxed on how much they consume rather than how much they add to the economy or how many assets they maintain. Frank (1985) noted that because individual well-being depends on relative income, those who become wealthy impose a negative externality on those who are not so well-off. In a classic response to externalities, taxing consumption would improve everyone else's relative income position and enhance ▶ welfare.

On the other hand, consumption taxes may shift tax burden to the less well-off. Value added tax is a type of consumption tax that may shift tax burden because it is a tax based on the difference between the value of the output and the value of the inputs used to produce it and is imposed to all with no interest to their income.

But still, there is a debate if increased consumption taxes may finance government expenditures or if increased consumption taxes may partly finance a cut on employers' social security contributions, in order to improve competitiveness and protect jobs.

Cross-References

▶ Consumption
▶ Economic Well-being
▶ Utility
▶ Welfare

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Consumption, Sustainable

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Synonyms

Green consumption; Sustainability; Sustainable lifestyles

Definition

Sustainable consumption is a concept and discourse used to both identify and prescribe solutions to the ecological degradation of the Earth's natural environment. The concept implies that "over" and "under" consumption is partly responsible for persistent ecological deterioration and a move away from the current levels, type, and structure of consumption at a global level is required to address this.

Description

The term sustainable consumption first began to appear in the political-environmental discourse

of the late 1980s and early 1990s as part of a wider agenda that had evolved from concerns about the effects of human action on the natural environment (Murphy & Cohen, 2001). As ▶ sustainable development emerged as the main organizing discourse through which global and local environmental issues were to be tackled, the report of the 1992 Earth Summit in Rio de Janeiro, known as ▶ Agenda 21, stated: "the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialised countries" (as cited in Cohen, 2001, p. 27). One of the most significant aspects of this is that consumers of industrialized countries were now allocated co-responsibility for global environmental problems; prior to this, the population growth of less economically developed nations was identified as the primary cause of global ecological problems (Cohen, 2001). This reflected the changing power relation between industrialized nations on the one hand and newly industrialized and less developed nations on the other, as consumption levels and consumer practices of the populations of mainly Northern hemisphere nation states were now ascribed part responsibility for ecological degradation.

The development of policy and discourse quickly gathered momentum as sustainable consumption, and the related concept of sustainable development, increasingly became the organizing concepts in the problematizing of global ecological degradation and as a normative solution to this. Yet, the concept(s) are, and have been, criticized for their vague and ambiguous nature (Murphy & Cohen, 2001). Related, if not exemplifying this, was the fact that although definitions of sustainable consumption became numerous they remained conceptually quite nebulous. Indicative, for example, of the varied definitions is the following: "The use of services and related products which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life-cycle of the service or product so as not to jeopardise the needs of future generations" (OECD, 2002, p. 2).

Proponents of the concept tend to adopt an objectivist approach implying a definitive level of natural resources, or carrying capacity, which are not only rapidly depleting but are being unequally consumed. For example, in the UNDP Report 1998, highlighting the unequal impact of global consumption, it was claimed that "20 % of the global population in the highest income countries account for 86 % of total private consumption expenditures, with the poorest 20 % accounting for 1.3 %" (UNDP, 1998, p. 2). This approach, in parallel with attempts to address criticisms concerning the vagueness of the concept, spurred efforts to materially measure the physical and biological limits of global natural resources and, interrelated with this, led to the development of scientific indicators and instruments for that purpose such as the concepts of ▶ ecological footprint and carrying capacity. Others have argued that the inherent vagueness of the sustainability agenda is deliberate, for it acts as a basis upon which people can be brought together to seek common ground and, as such, should be conceived as a political and social construct, not a scientific blueprint (see Vig, 1999).

A striking, if not defining, feature of many of the definitions of sustainable consumption is the almost ubiquitous conflation of sustainable conception with ▶ human needs, future generations, and quality of life. Here, the satisfaction of "▶ basic needs," a prominent aspect of most definitions of sustainable consumption, has aroused considerable debate and critique. While environmentalists and philosophers have tended to espouse the necessity for a transformation in consumer culture to one orientated around basic needs (see Lodziak, 2002), sociological theories of consumer culture have questioned the very concept of basic needs (Slater, 1997). The premise behind basic needs is that objective universal levels and categories of needs exist, and where these are exceeded, those involved are irrational, immoral, or greedy (Dolan, 2002). Allied with this is the tendency within some environmental and philosophical writing to romanticize a past of simpler lifestyles. Basic needs and happier people are conflated. This, of course, presupposes a belief in the dichotomy of "essential human needs" and those apparently

false or superfluous needs generated by "novelty, fashion, status and all other hooks of materialism" (Irvine, 1989, p. 24). The main criticism of this analysis has come from sociological and anthropological studies of consumer culture, including some social scientists interested in addressing issues of environmental degradation. This critique has revolved around the failure to understand and conceive of consumption as a set of sociocultural and historically embedded practices. Both historians and sociologists have shown that the meaning of "basic" and "luxury" consumption has changed over time and varied in different nation states and among social classes (see Dolan, 2009). Others have shown how levels and types of consumption embedded within specific social practices change and become standardized and normalized over time (Shove, 2003). In addition, if we are to operate on the premise of basic needs, we are still left with the question as to how we define basic needs and who should define them? On a more provocative note, it has been suggested that what many societies or social groups require "is more consumption, more pharmaceuticals, more housing, more transport, more books, more computers" (Miller, 2001, p. 227–228).

Yet, despite the ambivalence surrounding the concept of sustainable consumption, more diverse social developments have been subsumed within, and revaluated against, the discourse of sustainable consumption. One aspect of this is that social movements conceptualized as "downsizers" and "voluntary simplifiers" have increasingly been identified as social groups that can provide some insight in helping to foster sustainable consumption. Similarly, green consumption/consumers and ethical/fair-trade consumption have fallen within the wider organizing frame of sustainable consumption (Connolly & Prothero, 2008). Implicit in this research agenda is the assumption that many of the social practices of these groups embody sustainable consumption and as a consequence it may help in forging new sustainable lifestyles.

Despite the vagaries of defining sustainable consumption and the problems and ambivalences which have been identified with this, policymakers have increasingly sought to develop and deploy strategies under the discursive umbrella of sustainable consumption. One of the strategies to emerge is the attempt to foster greater self-regulation and rationalization of consumption practices (Hobson, 2001). To that extent, the embodiment of the discourse of sustainable consumption has evolved into a particular, albeit contested, set of policy instruments and strategies. In particular, the rationalization of consumption practices and the development of technological solutions have received considerable focus. Technological and economic instruments and systems are devised in an effort to foster the reduction of energy and material resources involved in both the production and consumption of specific consumer goods and services (see Heiskanen & Pantzar, 1997). Interconnected with this, there have also been attempts to persuade consumers to adopt more "▶ sustainable lifestyles" through marketing-communication strategies and educational campaigns (Hobson, 2002). Underpinning both these approaches is the development of markets, the concept of ▶ consumer choice and market-based solutions linked to the development of "green" goods and services. While the strategies adopted by some commercial organizations and the development of various green commodities have been labeled as "green washing," environmental policymakers and activists have also advocated market-based mechanisms. Here the consumer is conceived as a rational economic actor, who, through more appropriate and comprehensive information and market incentives, will adopt more ecologically friendly consumer behavior. Critics have argued that such approaches are underpinned by a flawed model of the consumer based on rational economics, which singularly fails to either recognize or examine the social processes underpinning specific consumer practices and ▶ norms.

A related debate surrounding market-based approaches to sustainable consumption involves the conception of the consumer as a voter. The basic premise is that consumers can act as political actors voting by purchasing goods and services that

purport to achieve "environmental gains," rejecting those that run counter to this and, in the process, send signals to those commercial organizations in the market place (Micheletti, 2003). To facilitate this, green/sustainability guides and manuals act as discursive resources to help inform and direct the consumer. While political consumerism has a long history, recent advocates of this approach have drawn upon sociological theories seeking to explain the intensification of processes of individualization and globalization to both illustrate and advocate for political consumerism as a strategy for generating more ecologically sustainable patterns of living (see Micheletti, 2003). In foregrounding their arguments, they contend that increasing globalization and individualization mean citizens are more likely to take individual responsibility for addressing environmental issues and, in turn, engage in acts of political consumerism. The ascription of individual consumers with responsibility, or co-responsibility, for achieving or moving in the direction of sustainable consumption has led some critics to suggest that this individualization and privatization of environmental responsibility obscures the very socioeconomic structures that have generated ecological problems (see Maniates, 2002). A fundamental belief underlying this critique is that levels of consumption in many western nations must be reduced. Within this analysis sustainable consumption is conceived as a goal that can only be achieved through, and to that extent must involve, reduced consumption. Moreover, this position, involving cross currents of thought from many diverse social scientific communities, involves a complete restructuring of society away from the prevailing system, which they conceive as based upon the conflation of ▶ happiness, ▶ consumption, and ▶ economic growth.

Counter to this has emerged an analysis and policy platform incorporating a more comprehensive understanding of consumption – as embedded in a set of social practices – and which rejects the de-modernization agenda of some critics of the prevailing social system. Instead, sustainable consumption is envisaged within an environmental reform agenda of ecological modernization (Spaargaren & van Vliet, 2000). Described as an environmental sociological theory for solving environmental problems, it requires the development of consumer-market-led initiatives and structural change through political policies involving the increased regulation of specific social practices of consumers, producers, and institutional actors.

However, it is the question of reducing aggregate consumption levels that remains the most controversial aspect of the current sustainable consumption agenda. Consequently, some policy advocates have tended to explicitly redefine the discourse of sustainable consumption so that the issue of reducing consumption is obscured by a rhetoric of "different" and "more efficient" consumption. While environmentalists, philosophers, and others have tended to proselytize for the need for reduced consumption in western nation states, supranational entities such as the European Union and international organizations like the United Nations have tended to adopt a more moderate approach. Here consumers are expected to develop more "appropriate" and "conscious" consumption (UNEP, 2001). Indeed the connection between sustainable consumption and QOL tends to be amplified here, while suggestions of actually reducing consumption are at best muted. To that extent, the conflation of QOL with consumption remains; QOL is seen as threatened or obscured by the transitory pleasures of consumption (see Ger, 1997); or perhaps, it masks the more conflictual issue concerning the ability and possibility for higher levels of consumption in all societies. Nonetheless, over time, the nexus of sustainable consumption and QOL appears to have tightened; much of this association has normative underpinnings and strong aspirational connotations, yet there have also been attempts to empirically demonstrate a relationship between QOL and increases or decreases in material consumption (see Eckersley, 2000). However, like the concept of sustainable consumption itself, the conceptualization and measuring of QOL remains equally problematic.

In conclusion, attempts to develop sustainable consumption through national and supranational policies remain primarily wedded to dematerialization strategies, essentially sustainable production. Equally, the more contentious issue of reducing aggregate consumption has tended to focus on water and energy levels, and

market-based incentives to redirect consumption toward more efficient goods and services rather than the more controversial, and clearly politically sensitive, issue of the wider consumption habits of consumers. The failure, if not the actual impossibility, of precisely defining levels of sustainability means the concept will perhaps continue to be dogged by criticisms. For instance, green consumption and voluntary simplicity movements are viewed by some as having considerable transformative potential, but transformative to what–at what point is sustainability reached (Dolan, 2002)? Undoubtedly a considerable body of literature addressing sustainable consumption has tended to critique western consumer practices while simultaneously proposing models and images of an apparently more sustainable and "humane" consumer culture (Ger, 1997). Yet, less analysis has been dedicated to explaining how and why specific consumer practices, needs, and cultures have evolved and changed. Perhaps here is the realm where future research should be directed. As such, it is naïve to proselytize for sustainable consumption; it remains contested and fluid with multiple meanings underpinned by different interests, ideological beliefs, and power relations. Moreover, despite the adoption and persistence of the concept as one of the main organizing frames for environmental problems and solutions, we must also be cognizant that any strategy, or stated goal, toward fostering sustainable consumption rests alongside attempts by many national governments to increase consumption to aid economic productivity and labor market employment levels.

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Contemporary Anti-urbanism

▶ Sharing Space in the Contemporary City

Content Analysis

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Definition

Content analysis is a research method that has been used increasingly in social and health research. Content analysis has been used either as a quantitative or a qualitative research method. Over the years, it expanded from being an objective quantitative description of manifest content to a subjective interpretation of text data dealing with theory generation and the exploration of underlying meaning.

Description

Content analysis is a research method that has been used increasingly in social and health research, including ▶ quality of life and well-being. Content analysis has been generally defined as a systematic technique for compressing many words of text into fewer content categories based on explicit rules of coding (Berelson, 1952; Krippendorff, 1980; Weber, 1990). Historically, content analysis was defined as "the objective, systematic and quantitative description of the manifest content of communication" (Berelson, 1952, p. 18). Initially, the manifest content was explicit and visible and had obvious components; however, over time, it has expanded to also include interpretations of latent content (i.e., the inferred and underlying meaning) (Graneheim & Lundman, 2004).

Most recently content analysis has been used either as a quantitative or a qualitative research method. Quantitative content analysis has been widely used in a mass communication research tradition as a way to count manifest textual elements, without attending to syntactical and semantic information embedded in the text (Weber, 1990). It was mostly characterized by a systematic, objective, quantitative analysis of written, verbal, or visual communication messages (Neundork, 2002). It enabled the exploration of particular aspects of the text and organizing them into explicit categories, which were then described using statistical methods (Spurgin & Wildemuth, 2009). In essence, it incorporated nonnumerical data collection techniques into hypothetical deductive research designs (Willig, 2008). Its aim was to examine research questions based on existing theories or previous empirical studies (Zhang & Wildemuth, 2009). The quantitative approach produces numbers that can be manipulated with various statistical methods. Therefore, it requires that the data are selected using probabilistic approaches to ensure representation, generalizability, and the validity of statistical inference.

Qualitative content analysis was developed primarily in anthropology, qualitative sociology, and psychology and has been one of the approaches used to interpret text data from a naturalistic paradigm concerned with theory generation and the exploration of meanings. Its main purpose is to gain new insights about the ways participants experience their world. It is defined as "a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (Hsieh & Shannon, 2005, p. 1278). Qualitative content analysis is intended to examine topics and themes that emerge from the data, paying attention to unique themes that describe the meanings of the phenomenon under study (Hsieh & Shannon, 2005). The qualitative approach usually produces descriptions or typologies of themes, along with expressions and examples from the participants' reflections on their personal experience. Hence, the researchers will purposively select a sample, which can inform the research questions.

Due to the varying beliefs among researchers regarding the nature of reality and epistemological position, a great diversity is reflected in

meaning and use of concepts, procedures, and interpretation in qualitative content analysis (for more details see Graneheim & Lundman, 2004). As reflected in current research work, the qualitative and quantitative approaches are not mutually exclusive and at times have been used in combination. As a result content analysis represents a family of analytic approaches, which are varying depending on the theoretical and substantive interests of the researcher and the problem being studied (Weber, 1990).

Qualitative content analysis is not a single method but rather includes several distinct approaches. Hsieh and Shannon (2005) identify three distinct approaches, including conventional, directed, and summative. The research purpose, in most cases, determines the approach that should be used.

Conventional content analysis, also referred to in the literature as inductive content analysis is used when the research purpose is to describe a phenomenon on which there is only limited literature and no existing theory (Elo & Kyngas, 2007). One of the advantages of this approach is the attainment of direct information from study participants without imposing preconceived categories or theoretical perspectives (Hsieh & Shannon, 2005).

Elo and Kyngas (2007) summarized three main steps in the analysis process of inductive content analysis, including (a) open coding, in which notes and headings are written in the text while reading and rereading the written material; (b) creating categories, where notes and headings are collected from the margins on to coding sheets and categories are generated – these categories are grouped under higher order headings by integrating those that are similar while constantly comparing between these data and other observations that do not belong to the same category– and(c) abstraction processes, through which an overall description of the topic is done through a representation of a final set of hierarchical categories (e.g., main categories, generic categories, and subcategories). Sometimes this hierarchy is described visually in a dendrogram, which is a treelike diagram that illustrates how the data are collapsed into clusters.

Directed content analysis, also referred to as deductive content analysis, is used when there is existing theory or prior research on the subject/phenomena being studied, but this knowledge is either needed to be validated or is incomplete, and there is a necessity to expand the existing knowledge or the description about the phenomena. Based on this previous knowledge a structured analysis is operationalized (Burns & Grove, 2005), and the analysis moves from the general to the specific based on an earlier theory, model, mind maps, and literature reviews (Burns & Grove, 2005). Data are collected primarily through interviews that may include open-ended questions, but in contrast to the inductive approach, targeted questions are developed based on previous knowledge and the predetermined categories that are being used (Hsieh & Shannon, 2005). The findings from a directed content analysis offer confirmatory and disconfirmatory evidence for a theory or a model. These evidences are presented by describing categories with exemplars.

Elo and Kyngas (2007) summarized two main steps in the process of deductive content analysis, including (a) the development of a categorization frame using existing theory or prior research and determining operational definitions for each category and (b) coding data according to the categorization frame (predetermined categories codes). In addition, text that could not be categorized with the initial coding scheme would be given a new code. Coding data that do not fit with the predetermined categories codes might be suggestive of a contradictory view of the phenomenon or might further refine, extend, and enrich the theory (Hsieh & Shannon, 2005). One of the challenges of the directed approach is that the predetermined codes might bias the identification of relevant data, increasing the chances that the researcher will find evidence that is supportive rather than nonsupportive of a theory. At the same time, this approach prevents the researcher from working from the naive perspective that is often viewed as the hallmark of naturalistic designs (Hsieh & Shannon, 2005). Reports on the frequency of categories derived from the theoretical model and the frequency of

newly identified categories for each participant and for the total sample can be used for the interpretation of the data.

The third identified approach is the summative content analysis. This approach starts with the counting of words or manifests content and then extends the analysis to include latent meanings and themes. This approach seems quantitative in the early stages, but its goal is to explore the usage of the words/indicators in an inductive manner (Hsieh & Shannon, 2005).

In the area of quality of life content analysis has been utilized for different purposes. One use of qualitative content analysis is when a researcher's aim is to understand the quality of life or the health-related quality of life (HRQOL) among different populations and contexts. For example, using a conventional approach, Norris and King (2009) explored women's subjective experiences regarding HRQOL in the context of living with coronary artery disease. A conventional approach was suitable for this research purpose because the limited knowledge on the meaning of HRQOL in patients, particularly women, undergoing treatment for coronary artery disease.

Another common use of content analysis is in the process of developing new measures or adapting measures for different target groups. For example, Walsh, Irwin, Meier, Varni, and DeWalt (2008) investigated the differences in perceptions of patient-reported outcome domains between youth from the general population and youth with asthma in order to develop a patient-reported outcomes item bank. Data were collected through focus groups and content analysis was used to identify the unique experiences of children with asthma across a broad range of health domains.

Content analysis has also been used in studies that examine aspects of validity. For example, Gadermann, Guhn, and Zumbo (2011) investigated the substantive aspect of ▶ construct validity of the ▶ Satisfaction with Life Scale adapted for Children (SWLS-C). Think-aloud protocol interviews were conducted and content analysis was used to analyze the cognitive processes of children when responding to the items of the SWLS-C to find out how they interpret and respond to the items.

In summary, content analysis is a diverse method that has broad appeal in quality of life research and potentially can be a very useful tool in our toolkit of analytic approaches.

Cross-References

- ▶ Construct Validity
- ▶ Qualitative Methods
- ▶ Quality of Life
- ▶ Satisfaction with Life Scale Adapted for Children

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Content Validity

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Definition

Content validity refers to the degree to which an assessment instrument is relevant to, and representative of, the targeted construct it is designed to measure.

Description

Content validation, which plays a primary role in the development of any new instrument, provides evidence about the validity of an instrument by assessing the degree to which the instrument measures the targeted construct (Anastasia, 1988). This enables the instrument to be used to make meaningful and appropriate inferences and/or decisions from the instrument scores given the assessment purpose (Messick, 1989; Moss, 1995). All elements of the instrument (e.g., items, stimuli, codes, instructions, response formats, scoring) that can potentially impact the scores obtained and the interpretations made should be subjected to content validation. There are three key aspects of content validity: domain definition, domain representation, and domain relevance (Sireci, 1998a). The first aspect, domain definition, refers to both the conceptual and operational definitions of the construct. The former defines the domain of content that will be measured, and the latter, the items themselves, brings tangibility to this domain. Domain representation and domain relevance refer to how well the instrument as a whole matches the domain definition, and how relevant the elements of the instrument are to the content domain, respectively. Content validity is compromised to the extent that it does not measure all relevant facets of the targeted construct, measures or scores the facets disproportionately, or measures domains outside of the targeted construct (Haynes, Richard, & Kubany, 1995).

Essential to establishing the content validity of an instrument is a clear definition of the domain and facets of the construct and a description of the intended purpose of the instrument. A construct that is poorly defined and undifferentiated will restrict the content validity of the instrument. However, developing a clear domain definition can be particularly challenging for constructs that are broad or that have fuzzy or inconsistent definitions (Murphy & Davidshofer, 1994). For example, there are dozens of self-report questionnaires available in the literature that measure the broad construct of ▶ body image. These questionnaires were developed on the basis of divergent ideas about the domains and facets of ▶ body image. An instrument's development is also dependent upon its intended purpose (DeVellis, 1991). The degree to which an instrument can be perceived as relevant and representative will vary with its intended use (e.g., brief screening or in-depth assessment), its target population, its particular construct domain (many constructs have similar labels but dissimilar domains and facets, i.e., ▶ intelligence), and its period in time (Haynes et al., 1995).

Although sometimes used interchangeably with content validity, face validity is not equivalent to content validity. Face validity most commonly refers to the degree to which the items on an instrument appear to be related to the construct they are attempting to measure to both test users and test respondents. While this may be a desirable attribute of an instrument, it does not provide evidence of the validity of test scores and is not considered to be a true source of validity evidence (Mosier, 1947; Sireci, 1998b).

Content validation is a quantitative and qualitative process that is applicable to all elements of

an assessment instrument. During the initial development of an instrument, content validation aims to minimize potential error variance (underrepresentation, overrepresentation, misrepresentation) associated with the instrument and to increase the likelihood of gathering supportive ▶ construct validity evidence in later studies (Haynes et al., 1995). Procedures used to evaluate content validity can be classified generally as judgmental or statistical (Sireci, 1998a). Both methods make use of subject matter experts (SMEs) who evaluate all elements of the instrument and rate them according to their relevance and representativeness to the targeted construct. Additionally, SMEs may judge the instrument on other aspects, such as specificity and clarity of the instrument's various elements and the appropriateness of the domain definition. SMEs can include members of the targeted population, content experts, and/or measurement experts. Because content validation studies are generally conducted using a small sample of SMEs who are required to make a variety of important judgments and can have a key role in determining the final composition of an instrument, these individuals must be selected with care and the data analyzed carefully. Judgmental methods of assessing content validity involve providing an index reflecting the degree to which the content of the instrument passed the scrutiny of SMEs. Statistical methods include procedures such as multidimensional scaling, cluster analysis, or factor analysis (Sireci, 1998a). These methods focus on an analysis of item or test score data which avoids the problem of bias or error in item ratings associated with the judgmental method. Guidelines for conducting a content validation study have been put forth by several researchers (e.g., DeVellis, 1991; Haynes et al., 1995; Murphy & Davidshofer, 1994; Sireci, 1998a).

In sum, content validity, which is subsumed under the broader category of ▶ construct validity, seeks to provide evidence that an instrument is measuring what it purports to measure by examining the degree to which the elements of the instrument are relative to and representative of the targeted construct.

Cross-References

▶ Body Image
▶ Construct Validity
▶ Intelligence

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Contentment

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Synonyms

Getting what you want; Goal-achievement gap; Meeting aspirations; Satisfaction

Definition

Contentment is the degree to which one perceives one's wants are being met. It involves a cognitive judgment in which perceptions of life as it is are compared with notions of how life should be. This estimate of success in meeting wants figures in the overall evaluation of one's life. In this context it is referred to as the "cognitive component" of happiness.

Description

The term "contentment" is often used as a *synonym* for "happiness" and is then used to denote our subjective satisfaction with our life as a whole. Yet the term is also used in a more specific sense for a *component* of happiness. This lemma is about that specific use of the word "contentment."

When estimating how much we like the life we live, we tend to use two more or less distinct sources of information: our affects and our thoughts. One can observe that one feels fine most of the time and one can also judge that life seems to meet ones (conscious) demands. These appraisals do not necessarily coincide. We may feel fine generally but nevertheless be aware that we failed to realize our aspirations. Or we may have surpassed our aspirations but nevertheless feel miserable. Using the word "happiness" in both these cases would result in three different kinds of happiness, an overall judgment commonly denoted with the term happiness and two more specific appraisals of one's life.

To mark these differences, Veenhoven (1984, 2009) distinguishes between *overall happiness* and *components* of happiness and among the latter an affective component called "hedonic level of affect" and a cognitive component called "contentment." This conceptualization forms the basis of the World Database of Happiness. In this lemma the cognitive component of happiness is described in more detail. The affective component of happiness is described in the lemma Affective Component of Happiness.

Concept

Contentment is the degree to which a person perceives that his/her aspirations are being met. Michalos (1985, p. 404) calls this the "goal-achievement gap." The concept presupposes that an individual has developed conscious wants and has formed an idea about the realization of these wants. Whether this idea is factually correct does not matter; the concept concerns the individual's perception.

When individuals assess the degree to which their wants are being met, they may look both backward and forward and estimate what life has brought them up to now and what it is likely to yield in the future. Timeframes are likely to differ across persons and situations.

Measures

Unlike hedonic level of affect, contentment can only be measured using self-reports. An outside observer cannot see what a person wants from life and how successful that person perceives to be in meeting his or her wants. Self-reports can be elicited in several ways.

Simple Global Self-Estimates

The matter can be addressed in single direct questions, such as the following: "How successful are you in getting what you want from life?" A drawback of this approach is that respondents may not have a clear idea of what they want and therefore rather report how they feel. This problem is addressed in several ways.

Guided Global Self-Estimates

One approach is to bring goals to the awareness of the respondents using priming questions. In that vein, Kilpatric and Cantril (1960) start with open questions on what respondents imagine to be the "best possible" and "worst possible" life. They then presented a 0–10 ladder scale to respondents and ask them to imagine that the top of the ladder represented the best possible life as they have just described and the bottom the worst possible life. As a last step, they ask respondents to rate their own present life on that "self-anchoring" scale. This measure is often used and is coded C-BW (*c*ontentment,

*b*est-*w*orst) in the collection Measures of Happiness (Veenhoven, 2012a).

Goal-Wise Estimates

Another approach is to have respondents first list their goals in life and next ask them to rate their success in realizing these. Contentment is then measured as average success, eventually weighed with ratings of importance. Measures of this kind are coded C-ASG (*c*ontentment: *a*verage *s*uccess in *g*oals) in the collection "Measures of Happiness" (Veenhoven, 2012a).

Findings

Application of these measures in various surveys has yielded a lot of findings, both distributional findings, that is, how contented people are, and correlational findings, that is, things that go with more or less contentment. Much of these findings are gathered in the World Database of Happiness (Veenhoven, 2012b, Findings by Measure type).

Distributional Findings

The above-mentioned question on how one's present life rates between the best and the worst possible has been used in 140 nations. Average ratings on the 0–10 ladder range between 3.2 in Togo and 8.0 in Denmark. Contentment is low in poor nations and more so than hedonic level of affect. Africans in particular rate their life close to the worst possible, but do not feel too bad. A similar pattern appears in Latin America where contentment is at a medium level, while the level of affects is high. A pattern of high contentment and high affect prevails among Western nations.

Correlational Findings

Studies at the individual level within nations show the expected links between contentment and common aspirations, such as having a spouse, a job, and a good income. Contentment also correlates with age. Although we do not feel better when getting older, we tend to become more contented. One of the possible reasons for this is that our aspirations are lowered in old age.

Explanations

There is much theorizing about how people set goals and assess their success in reaching their goals. Theories differ with respect to the standard of comparison used as well as to the time perspective adopted.

Social comparison theory emphasizes comparison with other people. One of the problems with this explanation is that it is commonly difficult to establish, which people serve as a "referent," and whether the comparison made is upward or downward. Life course analysis emphasizes an individual's personal situation as a point of reference and assumes that we compare with what we had earlier. Equity theory rather stresses that we compare with what we deem to be fair. Michalos (1985) integrates much of this thinking in his "Multiple Discrepancy Theory (MDT).

Several of these theories assume "reference drift," that is, changes in standards of comparison following success or failure. In this line, a common theory is that we want more the more we get and therefore remain equally contented. This theory is known as the "hedonic treadmill," a classic description of which is found in Brickman and Campbell (1971). This theory forms the basis of another classic thesis, the "Easterlin paradox," that holds that economic growth does not make us any happier since our subjective standard of living follows at an equal pace (Easterlin, 1974).

In this pool of explanations, one can always find one that explains a particular finding post hoc. Yet prediction on this basis is more difficult, since it is difficult to get a view on the hierarchy of goals in people's heads and on the variations in standards they use in different contexts.

Functions

Most animals can evaluate their life only on the basis of affective experience and the same holds for little children. Adult humans can also evaluate their life using reason and comparing their life as it is with notions of how they want their life to be. This is likely to facilitate adaptation in several ways. An obvious function is that it informs us how well we are doing with respect to our goals.

Since evolution has stripped most behavioral instincts from the human genome, we need self-set goals to direct our behavior and the pursuit of these goals requires monitoring of our progress, which stimulates innovative behavior. Thereby, it also helps us to keep going and to meet the universal need for self-actualization. When it comes to success in generally shared goals, contentment also informs us about how well we are doing compared to other people, which appeals to our universal need for esteem. Rayo and Becker (2007) argue that we are preprogrammed to compare and go for the better. Yet the phenomenon can also be seen as a consequence of other needs and the human social condition. In this latter view, the tendency to keep track of one's success in meeting one's wants is universal, but not inborn.

Cross-References

- ▶ Affective Component of Happiness
- ▶ Happiness
- ▶ Need Theory
- ▶ Social Comparison

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Contentment and Well-Being in Tibet

▶ Ethnic Tibetans: Application of the Personal Well-being Index (PWI)

Contentment with Life Assessment Scale

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Synonyms

CLAS

Definition

The Contentment with Life Assessment Scale (CLAS) is a five-item self-report measure that assesses people's global satisfaction with their life.

Description

Anglo-Americans report that they are satisfied with their lives, but there is evidence that they inflate their global ratings compared to their day-to-day experiences of life (Oishi, 2002). The Contentment with Life Assessment Scale (CLAS, Lavallee, Hatch, Michalos, & McKinley, 2007) was developed as a self-report measure of global ▶ life satisfaction that would capture people's less exaggerated feelings of satisfaction. To assess people's satisfaction

Contentment with Life Assessment Scale, Table 1 Sample entry form for the CLAS (With permission from Hatch 2006)

	CLAS item	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
1.	I am very content with my life	1	2	3	4	5	6	7
2.	I am living my life to the fullest	1	2	3	4	5	6	7
3.	When I examine my life as a whole, I feel I am not meeting my aspirations	1	2	3	4	5	6	7
4.	I feel dissatisfied because I'm not doing everything that I want to be doing in my life	1	2	3	4	5	6	7
5.	Nothing is currently lacking in my life	1	2	3	4	5	6	7

more accurately, the CLAS taps into feelings of ▶ contentment, a sense of fulfillment, and discrepancies between one's current life and one's wants or aspirations for that life.

Development of the CLAS

The development of the CLAS was initiated with a pilot study that used standard test development techniques to examine items that would capture people's existing feelings of dissatisfaction with their lives. Members of an advanced social psychology research methods class generated a pool of 50 potential items. After testing these items on psychology students and examining the distribution of scores for the items, two items that had relatively normal distributions and referenced feelings of contentment and fulfillment were retained. The CLAS items based on these items are as follows: "I am very content with my life" and "I am living my life to the fullest" (Lavallee et al., 2007).

The second approach taken by Lavallee et al. (2007) to more accurately capture feelings of dissatisfaction was to include items that assess the discrepancies between people's life as it is and their life as they think it should be. This approach was based on Michalos' ▶ multiple discrepancies theory (MDT, Michalos, 1985). MDT's premise is that ▶ satisfaction with life as a whole and with specific domains of life is a function of people's objective living conditions, objective discrepancies (e.g., between what they earn and their neighbors earn), and perceived discrepancies (e.g., between their current life and the life they would like to have). Several studies (Crawford Solberg, Diener, Wirtz, Lucas, & Oishi, 2002; Michalos, 1985, 2004) have demonstrated that life satisfaction was lower the greater the gaps between people's "wants or desires" and their current achievement of these wants, with Michalos (1985, 1991a, 1991b, 1993a, 1993b) demonstrating that gaps between one's current life and one's desired life are among the best predictors of life satisfaction. In the CLAS, two negatively keyed items directly assess self-discrepancies: "I feel dissatisfied because I'm not doing everything that I want to be doing in my life" and "When I examine my life as a whole, I feel I am not meeting my aspirations." The use of these negatively keyed items distinguishes the CLAS from the current gold standard in life satisfaction measurement, the ▶ Satisfaction with Life Scale (SWLS, Diener, Emmons, Larsen, & Griffen, 1985). The SWLS, which has been in use for over 20 years, consists of five positively keyed items and no negatively keyed items. The CLAS also differs in content from the SWLS in that it is less focused on material conditions of life and more focused on meeting aspirations and on feeling content and fulfilled. The final item in CLAS indirectly assesses people's belief that they have what they want in life: "Nothing is currently lacking in my life."

Scoring the CLAS

As shown in Table 1, respondents indicate the extent to which they agree or disagree with each statement of the CLAS by choosing the appropriate response from the seven categories, running

from 7 = strongly agree to 1 = strongly disagree. Only entries where the respondent provided an answer to each statement are scored. The first step in scoring is to reverse-score (i.e., a "7" would become "1") the two negatively keyed items, items 3 and 4 in Table 1. Then the two reverse-scored responses are summed with the three positively keyed responses to produce a total score for the scale. Thus, total scores can range from a low of 5 to a high of 35.

Psychometric Properties

In three studies Lavallee et al. (2007) evaluated the psychometric properties of the CLAS and compared it to the SWLS (Diener et al., 1985). In all three studies, the CLAS and SWLS were highly correlated, giving support for the ▶ convergent validity of the scale. The results of study 1, based on three general population samples, showed that life satisfaction as assessed with the CLAS is a unidimensional construct that is internally consistent (coefficient alpha of.87). People reported significantly lower levels of life satisfaction on the CLAS than on the SWLS, with the CLAS having a more normal distribution in the population. The CLAS was sensitive to the life conditions of marital status, income level, and age. Married, higher income people, and older people reported somewhat higher levels of life satisfaction than single, lower income people, or younger people.

In study 2, the ▶ reliability and validity of the CLAS were studied in a sample of university students in three phases: a pretest questionnaire, a 2-week ▶ daily diary, and a retest questionnaire 2 months after the initial questionnaire. The results showed that the CLAS scores were temporally stable across the 2-month interval and that the scores on the CLAS did not differ significantly as a function of scale placement within the questionnaire. Convergent validity of the CLAS was suggested by the significant correlations with two other measures of global life satisfaction, the SWLS and a popular single-item measure: "all things considered, how satisfied are you with your life as a whole now" (7-point scale, 1 = very dissatisfied to 7 = very satisfied, Michalos, 1985). Similarly to the other two measures of global life satisfaction, the CLAS was significantly positively correlated with self-esteem and self-deceptive enhancement and significantly negatively correlated with average daily negative effect. In terms of ▶ predictive validity, the CLAS predicted all forms of escapism studied that participants used to cope with their day (smoking, drinking alcohol, watching TV, and eating), and, after controlling for general health, the CLAS significantly predicted average daily stress-related symptoms. Of the three measures of global life satisfaction, the CLAS was the best predictor of daily escapist behaviors and daily stress-related physical symptoms.

In study 3, university students recorded their level of life satisfaction daily for 2 weeks after completing a pretest questionnaire that included the CLAS, the SWLS, and a measure of major life events. Both the CLAS and the SWLS were found to be sensitive to experiences of serious financial problems with people who had experienced major financial problems reporting significantly lower life satisfaction compared to people who did not have these difficulties. The CLAS scores were significantly correlated with the average daily life satisfaction scores (over the 2-week period), thus providing support for the convergent validity of the CLAS. The scores from both of these measures clustered close to the neutral rather than the satisfied point of the measurement scale.

Sensitivity

Testing the sensitivity of single-item measures of satisfaction with the quality of life, ▶ happiness, and life satisfaction and indexes of Satisfaction with Life Scale, and CLAS, Michalos and Kahlke (2010) asked respondents if their lives had become better, stayed the same, or become worse over two 1-year periods and correlated their responses to scores on the standardized measures and respondents' perceived changes. The general assumption about standardized measures of a perceived good life is that they will change in the same direction as respondents' perceived changes. It was found that the Satisfaction with Life Scale scores were consistent with

respondents' perceived changes 92 % of the time, CLAS scores 79 % of the time, happiness scores 77 %, and life satisfaction scores 56 % of the time.

Cross-References

- ▶ Happiness
- ▶ Subjective Well-Being

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Context of Comparisons

- ▶ Comparative Analysis

Context of Research, Social

- ▶ Research Relationship(s)

Contextual Indicators

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Synonyms

Indices; Signals; Signs of context

Definition

Contextual indicators often (although not always) take the form of quantifiable variables which are used to help describe and measure wider social, environmental, economic, physical, and demographic contexts in which a particular phenomenon is operating. Contextual indicators tend to be defined and applied in such a way as to be measurable over space and/or time, allowing comparison and/or benchmarking to be undertaken against a contextual baseline. According to Wong (2003), p. 257, ". . .the development of [contextual] indicators involves a methodological process of moving from abstract concepts to more specific and concrete measures to yield policy intelligence." In this vein, contextual indicators have increasingly taken the form of policy-relevant variables that are defined and applied in such a way as to inform the communication, negotiation, and decision-making practices of agents and actors working within particular policy contexts (Noll, 2002).

Contextual Indicators, Table 1 Example: attributes of quality of life and associated contextual indicators

Dimension	Example contextual indicator(s)
Demographics	Population change, age (years), ethnicity (%), household composition (%), gender composition (%)
Health	Birth rate, life expectancy at birth (years), years of lost life to communicable diseases (%)
Environment/climate	Public green space per capita, average hours of sunlight per day, air quality (e.g., CO_2 emissions)
Employment	Economic activity rate, unemployment rate, long-term unemployment rate, average weekly hours worked
Knowledge and skills	Educational attainment (% of the total population at *X* qualification level)
Crime/safety	Crime rate, perceptions of safety
Housing	Tenure, housing supply (unit starts and completions), house prices, affordability, overcrowding, housing quality, density
Access to services	Access to public transport, hospital, GP surgery, dentist surgery, shops, early years nursery, school (cost and/or distance)
Economy/business climate	GDP, business birth rate, business death rate
Standard/cost of living	Average weekly household income, deprivation level, monthly household expenditure
Political involvement/ civic rights	Participation rate in local/national election(s)
Social opportunity and mobility	Participation rate in the workforce (male and female), ratio of female median income to male median income
Leisure and recreation	Leisure-related commercial activities per 1,000 people

Description

The emergence of the concept of quality of life at the end of the 1960s, as an alternative to the then dominant societal goal of increasing the material level of living (Noll, 2002, p. 50), gave rise to a new vogue, the development and use of indicators to quantify and measure quality of life (Bunge, 1975). However, despite the popularity of the concept in public and political arenas, there is no universally accepted definition of "quality of life"; in fact, there are wide-ranging intra- and interdisciplinary debates around conceptualizing, defining, and measuring the meaning of the concept. Quality of life has been described as being "...the result of complex interactions between a set of objective and subjective factors [dimensions]: the first refers to external conditions of an economic, socio-political, environmental and cultural nature, whilst the subjective factors refer to the individual's perception of his life and the satisfaction reached in the diverse dimensions of his life" (Somarriba & Pena, 2009, p. 120). A range of contextual indicators have been developed and applied to measure quality of life, and these dimensions, which include both objective and subjective aspects, have been found to vary according to the interpretation applied to the concept of quality of life as well as the spatial, cultural, institutional, and disciplinary context in which the concept is applied (Table 1).

What is evident from Table 1 is that the multidimensional nature of the concept, and the ambiguity that surrounds its definition, means that measuring and monitoring quality of life is a challenging exercise. Countless studies have demonstrated that quality of life is a context-specific phenomenon, and as such, the relationships between the different factors that shape quality of life, however defined, are complex. Indicators often reduce these processes and issues to a single statistic which can serve to mask complex interactions between social, economic, and environmental domains that underpin specific understandings of quality of life (Frønes, 2007). The challenging conceptual task of defining the meaning of quality of life as well as the reductionist nature of indicators can create difficulties for researchers and policymakers when attempting

to establish meaning and associations in time and/or space. These challenges can also lead to the misinterpretation or manipulation of results. In addition, although it has been argued that descriptive and normative contextual indicators can be equally useful for understanding quality of life in particular contexts, their value is dependent on the selection and application of the indicators being underpinned by an appropriate and well-defined theoretical framework and robust and reliable data. The absence of appropriate theorization to underpin the selection of indicators, the dominance of subjective interpretation by researchers regarding the definition of quality of life, and the reliance on poor or inappropriate datasets are criticisms that have been leveled at previous quality of life studies and are challenges that need to be carefully addressed when defining and applying contextual indicators when monitoring quality of life.

Cross-References

- ▶ Benchmarking
- ▶ Comparative Analysis
- ▶ Indicators, Quality of Life
- ▶ Monitoring
- ▶ Quality of Life

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Contexual Factors Limiting Work

- ▶ Work Limitations

Contingencies of Self-Worth and Sexual Satisfaction

- ▶ Relationship Contingency and Sexual Satisfaction

Contingent Employment

- ▶ Casual Employment

Contingent Work

- ▶ Temporary Employment

Continuing Education

- ▶ Lifelong Learning

Continuity Theory of Successful Aging

- ▶ Multidimensional Model of Successful Aging

Continuous Time Analysis

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Synonyms

Stochastic differential equation modeling

Definition

Most longitudinal analysis procedures in social and behavioral science confine their results to the time points at which the data have been collected. However, many processes as, for example, the development of subjective well-being, happiness, and satisfaction do not stop between these discrete-time points. Continuous time analysis is able to fill the gaps in the form of model-based estimates between observation time points and to add predictions after the last observation time point. The stochastic differential equation model used is an advancement of the well-known autoregression model.

Description

Continuous time analysis goes back to Newton and Leibniz, who originated the tools of differential and integral calculus. It took not less than two and a half centuries before differential equations were introduced into social science for longitudinal analysis (Coleman, 1968; Simon, 1952). Undoubtedly, one reason for the slow spread was the difficulty of handling random phenomena in continuous time, in particular the definition of the random walk process on a continuous time scale (Wiener process) as well as the associated stochastic integral. However, the mathematical problems are solved and need not concern the research practitioner.

Traditionally, the application of continuous time methods was restricted to $N = 1$ research and estimation in the stochastic case was done by $N = 1$ time series estimation methods, especially filter techniques. From 1990 onwards, Singer (1990, 1993, 1998) worked on the adaptation of these techniques for continuous time analysis of panel data. Singer's (1991) program LSDE (linear stochastic differential equations) performs maximum likelihood estimation of the continuous time model on the basis of the so-called exact discrete model (EDM). The EDM was developed in the early 1960s by Bergstrom (1988). By means of nonlinear constraints, it links the underlying continuous-time model parameters in Eq. 1 in an exact way to the discrete-time parameters in Eq. 2. The heart of the equations consists of the continuous-time drift matrix $\mathbf{A}$ which is linked to the discrete-time autoregression matrix $\mathbf{A}_{\Delta t_i}$ by the matrix exponential given in Eq. 3. $\mathbf{A}$ gives the endogenous effects in continuous time and $\mathbf{A}_{\Delta t_i}$ the resulting effects over each of the observation intervals $\Delta t_i = t_i - t_{i-1}$ for $i = 1,2,\ldots,T$, T the total number of observation time points. Similar links as between $\mathbf{A}$ and $\mathbf{A}_{\Delta t_i}$ in Eq. 3 are derived for the fixed intercepts ($\mathbf{b}$ and $\mathbf{b}_{\Delta t_i}$), random intercepts ($\boldsymbol{\kappa}$ and $\boldsymbol{\kappa}_{\Delta t_i}$), and process errors ($\mathbf{G}\frac{\mathrm{d}\mathbf{W}(t)}{\mathrm{d}t}$ and $\mathbf{w}_{t_i-\Delta t_i}$). $\mathbf{W}(t)$ is the multivariate Wiener process or random walk process through continuous time and $\mathbf{G}$ a transformation matrix allowing arbitrary variances and correlations between the elements. The fixed intercept terms may be extended into exogenous effect terms. Details can be found in Oud and Singer (2008) and in Oud and Delsing (2010).

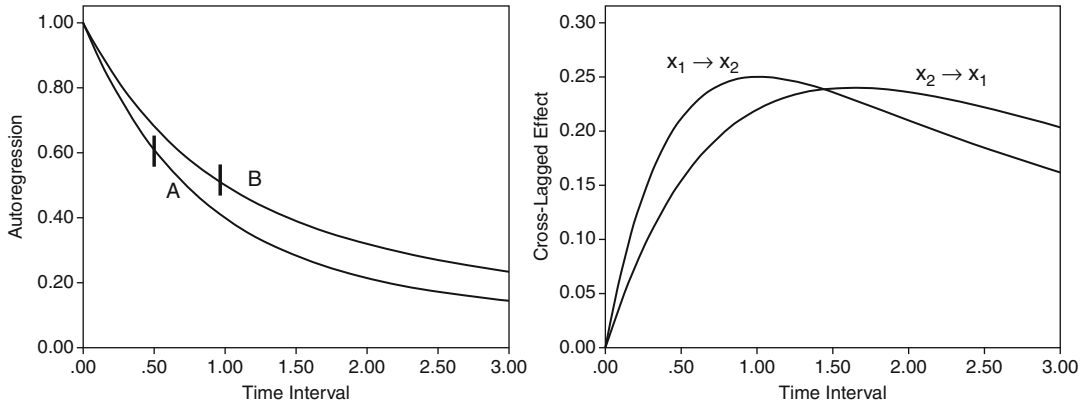
$$\frac{\mathrm{d}\mathbf{x}(t)}{\mathrm{d}t} = \mathbf{A}\mathbf{x}(t) + \mathbf{b} + \boldsymbol{\kappa} + \mathbf{G}\frac{\mathrm{d}\mathbf{W}(t)}{\mathrm{d}t}, \quad (1)$$

$$\mathbf{x}_{t_i} = \mathbf{A}_{\Delta t_i}\mathbf{x}_{t_i-\Delta t_i} + \mathbf{b}_{\Delta t_i} + \boldsymbol{\kappa}_{\Delta t_i} + \mathbf{w}_{t_i-\Delta t_i}, \quad (2)$$

$$\mathbf{A}_{\Delta t_i} = \mathrm{e}^{\mathrm{A}\Delta t_i}. \quad (3)$$

An alternative way to estimate the continuous time parameters for panel data through the EDM is structural equation modeling (SEM). This was started by Oud (1978), using the so-called indirect method in estimating the EDM, used also by Tuma and Hannan (1984) and Arminger (1986). It consists of first estimating discrete-time parameters by means of a SEM or similar program and then separately, in a second step, deriving the continuous time parameter values using the EDM. In general, the indirect method cannot be recommended. A simple example, where the indirect method breaks down, is in the case of unequal observation intervals.

Oud and Jansen (2000) showed how nonlinear SEM software packages such as Mx (Neale, Boker, Xie, & Maes, 2006) can also be employed for maximum likelihood estimation of the continuous-time model parameters, but using the direct method, that is, applying the nonlinear constraints of the EDM directly during estimation.



Continuous Time Analysis, Fig. 1 Two autoregression functions (*left*) and two cross-lagged effect functions (*right*) (With permission from Oud and Delsing (2010))

A thorough comparison between the LSDE/EDM procedure using filter techniques and the direct SEM/EDM procedure was made by Oud and Singer (2008) in a series of Monte Carlo simulation studies. It turns out that in case the same model is analyzed in both procedures and the data are appropriate for both procedures, the estimation results from filter techniques and SEM are equal.

Why Continuous Time Modeling?

In addition to filling the gaps between the observation time points, continuous time analysis also solves serious problems connected to the results of a discrete-time analysis. For example, for a bivariate process with two variables x_1 and x_2, (e.g., physical and social well-being; $\mathrm{x} = [x_1 x_2]'$), the autoregression matrix $\mathbf{A}_{\Delta t_i}$, which is the one analyzed and interpreted in a discrete-time analysis, has two autoregressions on the diagonal and two cross-lagged effects off-diagonally. Because the effect of x_1 on x_2 (and x_2 on x_1) is observed after some time delay Δt_i, cross-lagged effects are often considered appropriate for causal interpretation. However, this is a misinterpretation, consisting in the assumption that the effects jump from time point $t_i - \Delta t_i$ to time point t_i and that between measurements nothing happens. In fact, the estimated autoregressions and cross-lagged effects are complicated mixtures of the corresponding continuous time effects in the drift matrix $\mathbf{A}$ (auto-effects on the diagonal and cross-effects off-diagonally). This takes place in a constant interchange over, and heavily dependent on, the length of the observation interval Δt_i. For example, a variable with a high auto-effect, meaning that there is a strong tendency to sustain its value over time, tends also to retain the influence of other variables over a longer time than a variable with a low auto-effect. So, even a relatively small continuous time cross-effect can result in a relatively high cross-lagged effect in discrete time if the variable influenced has a high auto-effect.

Discrete-time analysis gets into extreme trouble, however, in the case of unequal observation intervals. When different discrete-time intervals are used in the same study or different researchers study the same causal effect but use different intervals, it becomes impossible to compare the strength of the effects found. By definition, autoregression functions have value 1 at an interval of 0 (no change), and generally, this value decreases, when the observation interval becomes longer. In Fig. 1 (left), autoregression function A is everywhere lower than autoregression function B. However, the analyst of A, whose data are collected with interval $\Delta t_1 = 0.50$, would come to the erroneous conclusion that the autoregression in his study is larger than in the study of B with $\Delta t_2 = 1.00$, because the value of 0.61 found in his study is larger than the value of 0.50 found in the study of B.

The cross-lagged effects shown in Fig. 1 (right) lead to even more confusing results. Unlike autoregression functions, which start at

value 1, cross-lagged effect functions have starting value 0 (different variables cannot yet have any influence on each other over a zero interval), then build up the effect until a maximum is reached, and finally return to 0 if the model is stable. A possible and by no means rare property of cross-lagged effect functions is that they are crossing (at $\Delta t_1 = 1.44$ in Fig. 1). Suppose the discrete-time analyst wants to know which of the reciprocal effects (x_1 on x_2 or x_2 on x_1) is larger. If he takes data with interval $\Delta t_i < 1.44$, he will come to the conclusion that $x_1 \rightarrow x_2$ is larger, whereas he would come to the opposite conclusion for $\Delta t_i > 1.44$.

Even worse in this case, choosing and maintaining the same observation interval does not help. The 3×3 drift matrix **A** in this case is

$$\begin{array}{c} \\ x_1 \\ x_2 \\ x_3 \end{array} \begin{array}{c} \begin{array}{ccc} x_1 & x_2 & x_3 \end{array} \\ \begin{bmatrix} -0.84 & 0.44 & 0.64 \\ 0.76 & -1.60 & 0.40 \\ -0.09 & -0.69 & -1.05 \end{bmatrix} \end{array}$$

So, the continuous time effect of x_1 on x_2 is larger than the other way round. However, researchers operating in discrete time would all come to a wrong conclusion for $\Delta t_i \geq 1.44$, no matter whether the intervals are the same or not.

Recent Software

In Oud and Singer (2008), an updated version of the LSDE package was used, called SDE and written by Singer in Mathematica. The SEM/EDM procedure has recently been implemented in OpenMx by the program CT-SEM (Voelkle & Oud, 2011). This program is quite flexible in terms of the number of variables, time points, and time intervals including individually varying time intervals. It can be downloaded from the first author's website http://www.socsci.ru.nl/~hano.

Cross-References

- ▶ Happiness
- ▶ Longitudinal Data Analysis
- ▶ Multivariate Statistical Analysis
- ▶ Satisfaction
- ▶ Subjective Well-being

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Contraception

▶ Birth Control

Contraception Programs

▶ Family Planning

Contractual Flexibility

▶ Temporary Employment

Control

▶ Empowerment

Control Groups

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Definition

Control groups are involved as part of an experimental design and represent those individuals who do not receive the intervention, manipulation, or treatment. These individuals serve as the *baseline* or *reference* group for the experiment (Cohen & Swerdlik, 2005).

Description

Scores of the control group, the group of individuals who do not receive the intervention, manipulation, or treatment, are used as estimates of the population parameters under the null hypothesis. To be most effective, control groups need to consist of individuals who were randomly selected from the population of interest and were also randomly assigned to this experimental condition. The control group should be comparable in all possible ways to the treatment group *prior to* their receiving the experimental manipulation. By comparing scores in the control group with those obtained in the treatment group, an experimenter is able to determine whether or not the manipulation had a significant effect on participants.

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Control of Corruption

▶ Trias Politica (Separation of Powers)

Control-Process Theories of Motivation

▶ Well-Being and Self-Wants

Contusion

▶ Traumatic Brain Injury

Convergence

▶ Self-Informant Agreement in Well-Being Ratings

Convergent Validity

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Definition

Convergent validity is a supporting piece of evidence for ▶ construct validity. The underlying idea of convergence validity is that related construct's tests should be highly correlated.

Description

Convergent validity is one of the topics related to ▶ construct validity (Gregory, 2007). Convergent validity states that tests having the same or similar constructs should be highly correlated. Two methods are often applied to test convergent validity. One is to correlate the scores between two assessment tools or tools' sub-domains that are considered to measure the same construct. In intelligence research, two intelligence tests are supposed to share some general parts of intelligence and at least be moderately correlated with each other. Then, moderate to high correlation shows evidence of convergent validity (Gregory, 2007). The other method is the multitrait-multimethod matrix (MTMM) approach. It includes the correlations between multiple constructs and multiple measuring methods and is rich in information regarding ▶ reliability, convergent validity, and ▶ discriminant validity. MTMM analyzes the same construct with different measuring tools. The discovery of moderate to high correlation can support the existing of convergent validity (Campbell & Fiske, 1959).

In Quality of Life research, there are some examples of convergent validity. First, the Moorehead-Ardelt Quality of Life Questionnaire II (MA II), an obesity-specific assessment tool, made cross-validation with two general Quality of Life assessment tools: ▶ Medical Outcomes Study 36-Item Short-Form Health Survey (SF-36) and ▶ World Health Organization Quality of Life (WHOQOL)-BREF Taiwan version. The six items of MA II are general self-esteem, physical activity, social contacts, satisfaction concerning work, pleasure related to sexuality, and focus on eating behavior. MA II tried to use these six items to measure the whole construct of Quality of Life. Most items of MA II, when correlating with four domains of WHOQOL-BREF (WHOQOL-BREF: $r = 44 \sim 64$), two domains of SF-36, physical health ($r = 0.49$), and mental health ($r = 0.58$), showed significant correlation, providing evidence of acceptable convergent validity regarding measuring the whole construct of Quality of Life(Chang et al., 2010).

Another empirical study of convergent validity investigated the psychometric properties of WHOQOL-BREF's. One of the study goals was to verify WHOQOL-BREF's convergent validity with SF-36 and Symptom Check List (SCL-90) instruments on male alcohol-dependent patients (da Silva et al., 2005). When compared to the constructs in SF-36, the psychological domain of WHOQOL-BREF had the highest correlation coefficient ($r = 78$) with the similar construct of SF-36, the mental health domain. This also held true for the physical domain of WHOQOL-BREF, showing the highest correlation value ($r = 5$) with the bodily pain domain of SF-36 (da Silva et al., 2005). The result is a satisfactory convergent validity. Moreover, consistent with the prediction of convergent validity, SCL-90 total score, summing 90 items of nine groups of psychological symptoms, showed the highest negative correlation with the psychological and physical domains of WHOQOL-BREF ($r = -.36 \sim -.68$.) (da Silva et al., 2005).

Cross-References

- ▶ Construct Validity
- ▶ Discriminant Validity
- ▶ Reliability
- ▶ SF-36 Health Survey
- ▶ World Health Organization Quality of Life (WHOQOL) Assessment

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Conversational Analysis

► Ethnomethodology

Convicted Sex Offender

► Sex Offender(s)

Conviction Statistics as Measures of Crime

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Synonyms

Court statistics; Crimes judged; Crimes known; Judicial statistics; Judiciary statistics; Moral statistics

Definition

Conviction statistics are collections of data concerning the activities of the criminal courts of a state.

Description

Historic Development of Conviction Statistics

The fall of the Napoleon Empire in 1814 led to a redesign of the European borders through the Treaty of Vienna in 1815. One of the first tasks of the restored monarchies of these countries was to establish a general picture of their situation in sociodemographic and economic terms. The use of statistics – a science that had received its name a few decades before through the works of Gottfried Achenwall – seemed a proper way of achieving this goal, and in a few years, many countries started publishing statistical series on a great variety of topics, including crime.

In that context, since the 1750s, Sweden – and Finland which was part of Sweden until 1809–had been keeping statistics on the number of victims of homicide, while in 1810 England and Wales started publishing annually, with data going back to 1805, figures of committals for indictable crime that correspond to persons charged for felonies and for misdemeanors tried by a jury. However, the first comprehensive national criminal statistics were published in France in 1827 and referred to the year 1825. Under the name of *Compte général de l'administration de la justice criminelle en France*, they included the number of persons brought to the assize courts (i.e., criminal courts) as well as the verdicts pronounced by the correctional tribunals, the royal courts, and the police courts. The statistics provided information on the number of accused persons for property and violent crimes – the two categories in which crimes were divided at that time in France – who had been judged, acquitted, and convicted, as well as details on the sentences imposed and their execution (Beirne, 1993).

One year later, in 1828, the Kingdom of Denmark started publishing a series called *sanction statistics* which were based not on the number of persons convicted but on the number of convictions and other sanctions imposed. In 1829, the Kingdom of the Netherlands – created through the Treaty of Vienna and including the current territory of Belgium – compiled 71 tables on the activities of the criminal justice in 1827 and published 5 of them in its second statistical collection (*Deuxième recueil de tableaux publiés par la commission générale de statistique*). The tables included the number of accusations, persons accused, persons acquitted, and persons convicted by the criminal courts, as well as the nature of the sentences imposed. In one of the first examples of the mistrust of public authorities in the interpretation of criminal statistics, these tables were presented without any comment, following the wishes of the statistical commission in charge of their publication. However, Adolphe Quételet (1829) produced a separate document with analysis and comments for the Royal Academy, whose publication was authorized by the King in 1829.

In 1830, Belgium became independent, and in 1833, Quételet and Edouard Smits published the statistics of the Belgian courts for the years 1826–1830. This publication presents the particularity of combining the presentation of tables with comments inspired mainly by the general explanation of crime provided by the recent book of Quételet on the propensity to crime (Quételet & Smits, 1833). In that context, some of the explanations concerning the local causes of criminality were suppressed by the Ministry of Interior. In 1835, the country started a new series of conviction statistics, with a more conventional model that included a short comment to the figures, but no explanation on the causes of crime (Rousseaux, Stevens, & Tixhon, 1998). One year later, the Kingdom of Sweden started publishing national statistics that included crime data based on court sentences and other findings of guilt, such as summary fines and waivers of prosecution (von Hofer, 2003).

As it can be seen, all the first collections of national criminal statistics were based on data from the courts. It is only in 1857, when England and Wales started publishing comprehensive national criminal statistics, that police data–indictable offenses reported to the police–were introduced.

Classic Debates on the Validity of Conviction Statistics as Crime Measures

In 1829, when the Netherlands started their criminal statistics series, Quételet – following the logic of a scientific approach – compared them with the ones that had been published in France in 1827. According to Quételet, figures for both countries were comparable because they had been collected in the same way, and the two countries applied almost the same laws and had a similar justice organization – a consequence of the occupation of the Netherlands during the Napoleon Empire – with the exception of the jury that had been abolished in the Netherlands. Four years later, when the first Belgium conviction statistics were published, Quételet and Smits also compared them with the ones of France. Other authors, such as Édouard Ducpétiaux in Belgium and William Wills in England, compared figures from Belgium, France, and England, while André-Michel Guerry focused first on comparisons of different departments of France and later on a comparison between that country and England. All these authors referred to conviction statistics (also known nowadays as judicial, judiciary, or court statistics) as *moral statistics* because in that period the expression *moral* was closer to its etymological sense of *proper behavior*, and as a consequence, statistics referring to the behavior of human beings in society were supposed to inform about the rules and the values of such society. Crime – and other behaviors such as suicide – was considered as actions against the proper behavior in society, i.e., as immoral behaviors. Both Guerry and Quételet were surprised by the regularity of such behaviors, e.g., the number of persons convicted for different offenses was similar year after year, a fact that led Quételet to propose the name *Social Physics* to the study of social

behavior through statistics. This discipline is indeed at the origins both of sociology (a term coined by Auguste Comte in 1839) and criminology (a term coined by Raffaele Garofalo in 1885).

However, in 1830, immediately after the publication of the first comparative study of conviction statistics by Quételet, Alphonse de Candolle (1830, 1832) unveiled most of the problems related to the use of such statistics as measures of crime. In particular, he stated that such statistics reflected only the crimes known to the judicial authorities and proposed thus to use the expression *crimes known* or *crimes judged* by opposition to *crimes committed*. He also specified that the difference between the latter and the former–which became later known as the *dark figure* of crime – was completely unknown and could vary "prodigiously" from one country to the other and from one type of crime to another. De Candolle explained that the difference could be produced by the offenses not discovered by their victims, the offenses for which the author is unknown, the decision by the victim of not reporting the offense, and the cases in which the legal procedure does not lead to a sentence of a court. He also mentioned that changes in crime trends could be produced by variations in the activities of prosecutors and not in crime itself.

In 1831, Quételet replied the objections of de Candolle suggesting that there was a constant proportion between the total number of offenses committed and the number of offenses known and tried by a judicial authority. One year later, de Candolle answered that such a hypothesis could be accepted in times of peace and if there had not been changes in the government or the administration of justice. Nevertheless, he considered that there could be differences between different regions of the same country and that the differences between countries rendered international comparisons almost impossible. One can recognize here the germ of the idea that comparisons of the *levels* of crime are problematic, while comparisons of *trends* could be conducted under certain conditions.

Finally, de Candolle explained that, if ever comparisons across countries were conducted, they should be based on the number of accused persons instead of on the number of sentenced persons, because many offenses known to the prosecution authorities do not lead to a conviction. One can also see here that de Candolle anticipated by 100 years the reasoning of Thorston Sellin when he stated in 1931 that "the value of a crime rate for index purposes decreases as the distance from the crime itself in terms of procedure increases." In 1967, the President's Commission on Law Enforcement and Administration of Justice presented this idea in a graphic way representing the criminal justice system as a *funnel* in which the number of cases decreases as the process advances.

The statement of Sellin – commonly referred to as *Sellin's dictum* – is often presented outside its historical context, which corresponds to the period in which the United States decided to start a national collection of criminal statistics. Until then, and even if Louis N. Robinson (1928, 1933) had been proposing since 1910 a detailed plan to develop judicial statistics inspired by the criminal statistics available in European countries, only prison statistics were available at the national level. During the second half of the 1920s, the public debate on crime was fuelled by a so-called crime wave that led the Federal Bureau of Investigations (FBI) and the Association of Chiefs of Police (IACP) to enter the debate. Thus, in 1929, the IACP committee on Uniform Crime Records published a very influential report proposing a police-based crime data system (Maltz, 1977).

Statisticians did not share that position. On the one hand, they preferred criminal statistics to be collected by a bureau of statistics and not, as Robinson clearly expressed in 1928, by a bureau of criminal identification, which could not be completely free in its interpretation because it belonged to the police organization. On the other hand, they preferred conviction statistics to police statistics, as can be seen in the *Report of the Commission for the comparative study of criminal statistics of various countries*–presented in the 18th session of the International Institute of Statistics held in Warsaw in 1930 – which concluded that "for the purpose of determining the

status and the movement of criminality in each country, it is the statistics of crimes objectively determined by irrevocable and definitive sentences which should be submitted to study."

One of the goals of Sellin's article was to take position in the debate between police and conviction statistics and, in particular, to respond to the position of the statisticians. Thus, the sentence that follows his *dictum* is the following: "In other words, police statistics, particularly those of 'crimes known to the police' are most likely to furnish a good basis for a crime index," accompanied by a footnote stating that he was "in complete disagreement" with the *report* (Sellin, 1931).

In the meantime, the congress of the United States closed the debate asking the FBI, in 1930, to start collecting data for the Uniform Crime Reporting system (UCR) and creating thus a national collection of statistics based on police records. Taking into account the huge international influence of research in criminology conducted in the United States since the 1930s, it is not exaggerated to say that the decision of the congress had also an influence on the scientific debate on the comparative validity of conviction and police statistics. The UCR became for at least two decades – until the development of self-reported delinquency studies – the major source of empirical data for research, and criminologists across the world turned also to their national police statistics to conduct similar studies. Conviction statistics were reduced to a secondary role that became still less important when Interpol started its collection of international police statistics in 1954, which lasted until 2006. Even the development of the *United Nations Surveys on Crime Trends and the Operations of Criminal Justice Systems (UNCTS)*, which includes data on police and conviction statistics since 1970, did not change that situation. Nowadays, cross-national comparisons of crime levels and crime trends continue to be based mainly on police statistics and health statistics from the World Health Organization. In particular, the United States never developed a national collection of conviction statistics, even if the Bureau of Justice Statistics still supports the *Court Statistics Project (CSP)*.

Validity and Reliability of Contemporary Conviction Statistics

Conviction statistics are currently published in many countries across the five continents but are seldom used to study crime. In that context, if the *validity* of a crime measure is defined as its capacity to measure efficiently the phenomenon under study, i.e., the extent of criminality, one can say that conviction statistics are less valid than police statistics. Indeed, conviction statistics will always show a lower number of offenses than police statistics because many cases do not lead to a conviction. Indeed, while the number of offenses recorded by the police is influenced mainly by the propensity of the population to report offenses, the way in which those offenses are recorded, and the criminal policy priorities as well as the efficiency of police forces (Aebi, 2010; von Hofer, 2000), the number of convictions is influenced also by the intervention of the Public Prosecution Services, the juries, and the courts, which can only condemn a person if the evidence collected is solid enough.

Moreover, conviction statistics based on the number of persons convicted represent a measure of the ▶ prevalence of delinquency – the number of persons convicted could also be expressed as the percentage of the population that has been convicted – that is not appropriate to measure the frequency or incidence of delinquency, i.e., the number of offenses that led to a conviction. The latter is available when the counting unit of the statistics is the conviction and not the person convicted. For example, an increase in the number of persons convicted may be the consequence of an increase in the number of offenses committed in group, even if the total number of offenses remains stable.

However, if conviction statistics are not useful to study the extent of crime – except probably for a very serious offense such as homicide – they can offer a reasonable valid basis to study time series provided that the reporting and recording practices, as well as the legal definitions of offenses, have not experienced substantial changes during the period considered, or whenever the influence of such changes can be measured by the researcher.

Indeed, if the ▶ *reliability* of a crime measure is defined as its capacity to provide measures that

are intersubjective and reproducible, i.e., to provide the same measure independently of the person that manipulates the instrument, one can say that conviction statistics are more reliable than police statistics. The reason is that conviction statistics are based on a decision taken by a judge that disposes of more detailed information than the police officers who registered the offense. For example, for the police officers that discover a person killed by shotgun, it is almost impossible to establish the intention of the author of the lethal shot and thus to decide whether the offense can be classified as murder, negligent manslaughter, assault leading to death, or sometimes even suicide. On the contrary, judges have collected all the relevant information and can pronounce an informed decision based on the applicable law. Thus, disposing of the same information, different judges should arrive to the same decision. Moreover, if their decisions are dissimilar, a superior court will unify the jurisprudence. As a consequence, we can conclude that conviction statistics are more reliable than police statistics as measures of crime.

In a comparative perspective, the main factors that must be controlled when using conviction statistics to measure crime trends in different countries refer to the differences in the definitions of offenses, in their procedural systems and in the rules applied to collect such statistics. The *European Sourcebook of Crime and Criminal Justice Statistics* (Aebi et al., 2010), which includes a chapter on conviction statistics in European countries, includes also information on the counting unit used for the statistics (the person convicted or the conviction), the stage of the process to which data refer to (before or after appeals), the use of a principal offense rule (an offender convicted for several offenses can appear several times in the statistics or only once – for the most serious offense – is such a rule is applied), and the rules applied when a person is convicted for multiple offenses of the same kind or when a person is convicted more than once during the same year.

Discussion

During the second quarter of the nineteenth century, most of the countries that are nowadays considered as industrialized – with the noteworthy exceptions of the United States – developed statistics that described the activity of their courts. The most detailed of these statistics provided information on the number of persons accused, judged, acquitted, and convicted, and the sentences imposed. The availability of this information led researchers to propose explanations to the levels of crime observed, to compare delinquency between countries, and, ultimately, to create a new science called criminology. However, the validity of these statistics to measure crime was a matter of discussion since their creation. Gradually, researchers divided themselves between those who believed that conviction statistics provided a measure of crime – considering that the guiltiness of the offender had been validly proved – and those who considered that they only measured the formal social reaction to it. Nowadays, a good part of the researchers have adopted an intermediate position that considers that conviction statistics are influenced by the efficiency of the criminal justice system, its priorities, its biases, and the confidence of the general public in that system (i.e., the different elements of the formal social reaction to crime) but provide at least an indirect measure of serious crime which, under certain conditions, can be used mainly to study its trends. Since 1930, when the United States decided to base the Uniform Crime Reporting System (UCR) on police statistics, the latter replaced conviction statistics in the public and scientific debates about crime. The low exposure of conviction statistics to the interpretations of the mass media and politicians of different borders may imply that they are less subject to manipulations than police statistics. Moreover, research suggests that conviction statistics are less valid but more reliable than police statistics as measures of crime (see Aebi & Linde, 2012, with references).

Cross-References

▶ Crime Estimates
▶ Cross-Cultural Comparison
▶ Data Analysis

- ▶ Data Collection Methods
- ▶ Deviance
- ▶ Fear of Crime
- ▶ Feeling Safe
- ▶ Moral Theories
- ▶ Trend Analysis
- ▶ Violence

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Co-occurring Chronic Diseases

- ▶ Multimorbidity or Comorbidity

Cooperative Problem Solving

- ▶ Collaborative Problem Solving, Crises, and Well-Being

Coping with an Unjust World

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Synonyms

Deservingness principle; Just-world theory; System justification theory

Definition

Just-world theory (Lerner, 1980) proposed that people have a fundamental need to believe that the world is a just place. According to the theory, people have therefore developed several strategies to cope with unjust events, ranging from helping to blaming victims of injustice. Subsequent research has identified additional ways in which people can cope with an unjust world (e.g., compensatory rationalizations and immanent justice reasoning).

Description

Belief in a Just World

▶ Justice is one of people's and society's core values. People generally strive to do the right thing and greatly value being treated fairly. Moreover, rules of justice are pivotal to the

functioning of most, if not all, societies. Yet, people are confronted with injustice on a daily basis. These events do not only entail the grave injustices we see on the news, such as wars and hunger, but also encompass individual events, such as when someone gets the promotion another person deserves. As people value justice so much, one would expect that they empathize with victims and try to help them, when they are confronted with innocent suffering or an unjust event. Paradoxically, people sometimes blame or even derogate victims for their ill fate (Hafer, 2000a). Where do these negative reactions come from? And how do people cope with injustice and strive for justice more generally? These are questions that have intrigued psychologists, sociologists, and philosophers alike.

Being confronted with innocent suffering enhances ▶ negative affect. Of course, seeing something terrible happen to another person can evoke feelings of ▶ anger or fear (together with empathic feelings). However, people also experience negative affect, because their general idea that the world is just has been compromised. Just-world theory (Lerner, 1977, 1980) proposes that that people have a fundamental need to believe that the world is a just place, that is, a place in which people get what they deserve. People believe that in general good things happen to good people and bad things happen to bad people. A confrontation with an innocent victim (something bad happening to a good person) threatens this belief, and people will have to restore it.

Just-world theory distinguished several strategies people can adopt to cope with injustice and restore the belief. According to just-world theory, people can help or compensate the victim, termed rational strategies. However, this is not always a viable option (due to for instance time constraints or no direct contact with the victim), and then, people will resort to irrational strategies to restore their belief in a just world (BJW). These irrational strategies include victim blaming and derogation.

The Functions of the Belief in a Just World

Lerner (1977) argued that the BJW develops early in childhood, when children give up the "▶ pleasure" principle and start to adhere to the "reality" principle. In the former, children tend to give in to immediate gratification. Over time, however, they learn that following certain prescribed behavior patterns leads to a certain (often bigger) outcome. This way, the "reality" principle develops, enabling children to delay gratification (Mischel, 1973). At this point, children enter into a personal contract with the world. Put differently, they learn that doing or inhibiting certain behavior entitles them to certain outcomes (i.e., deservingness). Of course, this development can only take place if the child grows up in a relatively secure and stable environment.

In adulthood, the BJW continues to serve an important function of psychological stability. According to Lerner (1980), "people want to and have to believe they live in a just world so that they can go about their daily lives with a sense of trust, hope and confidence in their future" (p. 14). Thus, the BJW is important for people as it helps make the complex social world manageable and predictable. Research has indeed found support for the idea the BJW enables people to delay gratification, focus on the future, manage uncertainty, and strive for long-term goals (Hafer, 2000b; Callan, Shead, & Olson, 2009; Bal & Van den Bos, 2012; Laurin, Fitzsimons & Kay, 2011).

While the main function of the BJW is making the world predictable and enabling people to focus on the future, believing in a just world has also been related to several psychological health indices. Several researchers have constructed scales to measure the BJW (e.g., Lipkus, Dalbert, & Siegler, 1996). In research, a higher BJW has been related to better well-being, positive affect, optimism, and effective coping with ▶ stress (for an overview, see Furnham, 2003). In other studies, a distinction between a BJW for the self (e.g., I get what I deserve) and a BJW for others (e.g., People get what they deserve) was studied more thoroughly (Sutton & Douglas, 2005; Sutton et al., 2008). Importantly, the positive consequences of the

BJW seem to be caused by the belief in a personal just world. The BJW for others, in contrast, has been related to negative attitudes toward disadvantaged groups (e.g., Bègue & Bastounis, 2003). Moreover, both types of BJW are only moderately correlated. Nevertheless, both forms of the BJW stem from the same justice ▶ motive to see the world as a just place (Sutton & Douglas, 2005). While believing in a personal just world enables people to cope with a complex social world, believing in a just world for others can justify negative reactions toward victims and other disadvantaged people.

While most studies focused on victim blaming and derogation by third parties, some studies have investigated how the BJW and (self-)blaming can be beneficial for victims and prisoners (e.g., Dalbert, 1998; Otto & Dalbert, 2005). These studies revealed that the BJW can be seen as a resource that enables coping with and making sense of being victimized for victims of injustice and ultimately facilitates moving on after what happened. For prisoners, a high BJW enables them to better cope with personal feelings of anger and improves their rehabilitation prospects.

The Deservingness Principle Vs. Other Justice Principles

The belief in a just world, as proposed by Lerner (1980), is also called the deservingness principle. It is based on equity as the central principle of justice. Put differently, it is an economically oriented view of justice in which the rules of justice are met when an individual's outcome or reward is proportional to his or her input or contribution (Deutsch, 1975). Many (Western) societies do have such an economic orientation. Hence, in many societies, the deservingness principle applies, and people will live by the rules of ▶ equity (Martin, 1999). However, other principles of justice do exist and people can adhere to more than one principle, depending on context (Deutsch, 1975).

These other justice principles are equality and ▶ need and apply in ▶ solidarity-oriented and caring-oriented groups or contexts, respectively. One could easily imagine that while a person might adhere to an equity principle of justice in general, contexts do exist in which he or she takes more of a caring or solidarity orientation, for instance, in schools, a home for the elderly, or when we see someone fall down on the street. In these instances, we are able to let go of our general justice principle of equity and focus more on the other person's needs. We want to teach our children, enhance the ▶ quality of life for the elderly, and come to the aid of the person lying on the street. These additional principles of justice should be included in the study of social justice to create a complete picture of the strategies people can adopt to cope with an unjust world.

Nevertheless, the introduction of just-world theory (Lerner, 1980) sparked a broad range of research, studying how people react to innocent victims and make sense of injustice. Below we describe several strategies people can adopt to cope with an unjust world.

Coping with an Unjust World by Victim Blaming and Derogation

The rational strategies of helping or compensating victims were an important part of the theory at the introduction. Yet, most research on just-world theory focused on the negative reactions people have toward innocent victims. These studies usually adopted an experimental paradigm in which people are confronted with an unjust event after which reactions toward the victim(s) are measured. Several studies have shown that victim blaming and derogating a victim are viable ways to relieve a BJW threat (for an overview, see Hafer & Bègue, 2005). Notably, in two seminal studies, using a modified Stroop task, Hafer (2000a) has shown that (a) people's concern for justice indeed increases after a confrontation with an unjust event and (b) the degree of victim blaming and derogation is related to people's concern for justice.

Furthermore, studies revealed that several factors influence to which degree victims are blamed for their ill fate. These factors are usually said to differ in the degree of BJW threat. For instance, victim blaming and derogation have been found to increase when the perpetrator has not been caught. This makes sense, because when the

perpetrator has been apprehended, the chances that justice will be served increase and the BJW threat decreases. Moreover, studies also indicate that these negative reactions are stronger when the victim is innocent, when the victim is similar to you, or when the crime is proximal to you in another way (see, e.g., Bal & Van den Bos, 2010, 2012; Correia & Vala, 2003; Correia, Vala, & Aguiar, 2001, 2007). Just-world theory can account for these seemingly paradoxical findings, because these innocent and similar victims pose a greater threat to the BJW and thus provoke stronger reactions to deal with this threat.

Related to this, Van Prooijen and Van den Bos (2009) showed that people blame innocent victims more when they have an interdependent self-construal as opposed to an independent self-construal. So, when people view themselves as part of a group, they are more inclined to blame victims. This could also be interpreted as a manipulation of threat, because when others (including the victim) are part of your self-view, then being confronted with a victim poses a greater threat than when your self-view does not include other people.

Coping with an Unjust World by Immanent Justice Reasoning

After the introduction of the theory, research focused mostly on severe forms of injustice, such as victims of rape or severe diseases. This focus shifted gradually, and researchers started to investigate how people cope with more benign forms of injustice and the manifestation of the justice motive in everyday life. Instead of investigating victim blaming and derogation, this line of research focused on how people deal with the bad breaks they sometimes have (e.g., your computer crashing just before an important deadline). These studies have identified additional sense-making strategies people adopt to cope with unjust events in everyday life.

Most notably, studies have revealed that people sometimes engage in immanent justice reasoning to cope with unjust events and uphold their BJW (e.g., Callan, Ellard, & Nicol, 2006; Callan, Kay, Davidenko, & Ellard, 2009; Callan, Sutton, & Dovale, 2010; Gaucher, Hafer, Kay, & Davidenko, 2010). These studies have shown that people often bias their recollection of past events in ways that enable them to sustain the BJW. They come to view current negative events as punishments for prior bad behavior. More specifically, negative events ease recollection of past negative behavior as a way of making the victim deserving of their present ill fate. Further studies also showed that people engage in immanent justice reasoning for positive events as well and for self-relevant as well as other relevant events (Callan et al., 2006; Callan, Kay et al., 2009).

Coping with an Unjust World by Compensatory Rationalizations

Another way in which people can deal with injustice is by compensatory rationalizations. Research on compensatory rationalizations stems from system justification theory (Jost & Banaji, 1994). System justification theory builds on and extends earlier work on just-world theory. The theory was introduced as a framework that could explain stereotyping and, more specifically, the paradoxical negative self-stereotyping by disadvantaged groups that could not be explained by the earlier ego-justification and group-justification accounts of stereotyping. Its basic premise is that, in addition to upholding a positive self-image and group image, stereotyping can also serve the function of upholding or defending the system (i.e., the status quo). That is, people are motivated to view the status quo as legitimate, good, and fair.

Similar to just-world theory, it assumes that people value ► fairness. Moreover, both theories argue that striving for a just world or system sometimes has antisocial consequences. Just-world theory proposes irrational strategies to deal with a confrontation with innocent victims, leading to victim blaming and derogation. System justification proposes that negative stereotypes serve to uphold the status quo, even when they concern the (disadvantaged) in-group. If people were only interested in upholding their own or their groups' ► self-esteem, derogating the in-group would not make sense. However, system justification can account for these reactions, because they propose that people engage in system justification. That is,

people will endorse the status quo, and hence their position in the system, because they want to believe the system is just. People can use compensatory rationalizations to cope with the unjust disadvantage of some groups by stating that they are superior to the majority group in other areas (Kay & Jost, 2003; Kay, Jost, & Young, 2005). That is, instead of derogating the disadvantaged, people could also endorse the view that the system is balanced and that no group has it all. For instance, people might endorse the idea that poor people, while disadvantaged financially, are happier and more honest than rich people. Studies have shown that people enhance traits of disadvantaged groups that are irrelevant to their plight and derogate disadvantaged groups on relevant traits (Kay et al., 2005). More specifically, the researchers found that people judge the powerful to be more independent and intelligent but less happy and the obese to be more lazy but also more sociable. Moreover, recent studies revealed that whereas right-wing people are more prone to derogation as a strategy to deal with disadvantaged groups, left-wing people more readily use compensatory rationalizations as a way of dealing with ▶ inequality (Kay, Capliński, & Jost, 2009). As such, victim enhancement might be an alternative to victim derogation as a means of coping with an unjust world.

In addition to compensatory rationalizations, research on system justification revealed that system-justifying beliefs enhance negative stereotypes of minority groups by both the majority group and the in-group (e.g., Jost, Banaji, & Nosek, 2004; Kay et al., 2009). Subsequent research on system justification broadened the perspective from an emphasis to negative (in-group) stereotypes of disadvantaged groups to other forms of defense of the status quo (e.g., resistance to system change and derogation of people who critique the status quo). These defensive reactions are found to be even stronger under system inescapability, system threat, system dependence, and low personal control (Kay & Friesen, 2011).

Research on system justification theory (Jost & Banaji, 1994) and just-world theory (Lerner, 1980) has been skewed toward the negative reactions people have toward disadvantaged groups or innocent victims. Nevertheless, taking action against inequality and helping innocent victims are also strategies that could be adopted to cope with an unjust world. Hitherto, this strategy has largely been neglected in research.

Coping with an Unjust World by Helping Victims

While helping and compensating the victim were an important part of just-world theory, research investigating these benevolent reactions is scarce. Compensatory rationalizations do offer a less negative coping strategy to deal with injustice than victim blaming and derogation, but this strategy does not decrease the injustice itself nor does it entail helping the victims. Helping could be a viable way to cope with an unjust event, as it entails taking action against injustice and could actually make the world more just. However, taking action is usually more effortful than cognitively coping with an unjust world, for instance by blaming or derogating the victim.

However, while the BJW is closely related to the degree to which people blame and derogate victims for their ill fate, other factors than the BJW might be more suitable to explain when and why people do help victims. For instance, the BJW does not predict well why some people unconditionally fight for justice and try to help the less fortunate, such as Martin L. King, over and above the deservingness principle that most other people adopt. These people might be able to inspire us to find the factors that do lead to helping or standing up against injustice as a strategy to cope with an unjust world. One possibility is that these people adhere to a different justice principle than the BJW. Future studies could shed more light on the factors that enable helping victims as a way of coping with an unjust world.

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Coping with Child's Death Using Spirituality and Religion

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Synonyms

Attachment theory, coping and child's death; Coping, belief in God and child's death; Grief, child's death and God; Mourning and religion; Religion and coping with child's death

Definition

Religion is defined as "an organized belief system that includes shared, institutionalized moral values, practices, involvement in a faith community, and for most, beliefs in God or a Higher Power" (Walsh, 2008, p. 5).

There are different definitions for ▶ spirituality in the mental health literature. Psychologists of religion as Pargament refers to it as the "search for sacred" (1999). In general, spirituality is described as a transcendental relationship with a Higher Power and also a sense of connectedness with fellow beings and the universe (Abbott, Berry, & Meredith, 1990; Pargament, Magyar-Russell, & Murray-Swank, 2005; Walsh, 2008).

Pargament (2005) argues that religious coping is a distinctive coping mechanism. He identifies five categories of religious coping: help with finding meaning for a stressful event, gaining mastery and control over uncontrollable situations, gaining comfort and closeness to God, getting intimacy with others, and coping to achieve a life transformation (for, i.e., religious forgiveness, religious conversion).

More generally, studies have shown that there are individual differences between coping strategies used by spouses/partners who lost a child (Barrera et al., 2007; Gilbert, 1997; Lohan & Murphy, 2005–2006; Schwab, 1992). These differences were found to be "sources of marital distress when the coping mechanism of one of the spouses triggered the defenses of the other spouse" (Ungureanu & Sandberg, 2010).

Description

The death of a son or a daughter is a death untimely, an event that defies the natural order of life, as it is believed that parents should not bury their children. Consequently, the grief processes related to this specific type of loss tend to be complicated and have the potential of generating a crisis for the parents. In a letter to a friend who lost a child, Freud wrote: "We find a place for what we lose. Although we know that after such a loss the acute stage of loss will subside, we also know that we shall remain inconsolable and will never find a substitute. No matter what may fill the gap, even if it be filled completely, it nevertheless remains something else" (Freud as quoted in Ricoeur & Gentet, 1996).

In their review of literature on spirituality and religion in dealing with death of a child, Ungureanu and Sandberg (2010) found that researchers agree that the differences in coping processes have the potential of precipitating ▶ distress in the parents' couple relationship (Gilbert, 1992, 1997; Schwab, 1992). According to these authors, the death of a child creates a special type of grieving: a parent is both grieving personally while being aware and involved in the grieving of their partner. Gilbert (1992, 1997) noted that both similar and different styles of grieving can be problematic. According to this researcher, disagreements on the right way to grieve, "being out of sync," disagreements on who is guilty for the death of their child as well as synchronous grieving, mourning at the same time, and being overwhelmed by grief can precipitate a marital crisis (Gilbert). It also seems that the effects of losing a child have a long-lasting effect on the parents and their relationship. In four longitudinal studies, Dyregrov and Dyregrov (1999), Lang, Gottlieb and Amsel (1996), and Reilly-Smoravsky, Armstrong, and Catlin (2002) found that parents are still affected 12–15 years after the tragic event.

Another aspect of the relationship that suffers during grieving the loss of a child is sexual intimacy. Hagemeister and Rosenblat (1997) and Schwab (1992) found a decline in the frequency of sexual intercourse after the death of a child. One researcher noted the dynamics between husbands and wives in this process: "For wives, husbands' desire may be experienced as repulsive and a confirmation of their emotional isolation. For husbands, wives' distancing and sexual non-responsiveness as rejection and denial of an important source of comfort in a crisis" (Oliver, 1999, p. 210).

There still is a paucity of research studies on spirituality and religion for couples dealing with the death of a child. Moreover, spiritual and religious beliefs and practices were researched and found to have positive influences on the individual mental and physical health, but similar research was not conducted on the impact on couple or family relationships (Ungureanu & Sandberg, 2010).

Pargament, Magyar-Russell et al. (2005) argue that religion is a unique process, with different, more general forms of coping. In addition to considering spirituality and religion as a unique way of coping, these authors find religion a unique source of significance, a unique contributor to mortality and health, and a unique source of distress as well, arguing that this phenomenon should receive attention separately from other coping concepts.

Five categories of individual religious coping were identified by Pargament, Ano, and Wacholtz (2005). The first category includes finding meaning for life's stressful events, mainly through defining God or a Higher Power's influence on the situation. *Gaining mastery and control* over difficult incidents in one's life is considered the second category of religious coping. Actions as seeking spiritual support, forgiveness, or connection with a power that transcends self were grouped under the third category of *gaining comfort and closeness to God*. Another category is *achieving intimacy with others and closeness to God* through participating in a faith community and seeking help and support from clergy and members of congregations. The fifth category refers to seeking to achieve a *life transformation* through looking for spiritual direction or even religious conversion. Pargament et al. also stressed that the results of religious coping are moderated by three variables: these strategies are more helpful for people who are more religious, in extreme situations, as well as belonging to certain religions, since there are differences in how people from different religions cope with adversities.

Relatively few studies emphasized spirituality and religion in coping with the death of a child (Brotherson & Soderquist, 2002; Higgins, 2002; McIntosh, Cohen Silver, & Wortman, 1993). Analyzing the influence of religious beliefs and church attendance in parents that lost a child, Higgins (2002) found that parents with a belief in afterlife and higher church attendance rates were less likely to be depressed compared with parents that were not particularly religious. In McIntosh et al. (1993) research on religion's role in coping with Sudden Infant Death Syndrome (SIDS), two ways in which religion was

beneficial were identified: parents involved in church activities have a larger ▶ support network which in turn predicts a better adjustment after the death of the infant as well as being able to ascribe meaning to a mostly medically unexplainable death.

An interesting qualitative study was conducted by Brotherson and Soderquist (2002). These researchers conducted in-depth interviews with parents that experienced a child death, asking open-ended questions about their coping mechanisms but purposefully did not include specific questions about religious or spiritual coping. They learned that parents spontaneously reported the influence of religion and relationship with God as part of their grieving process. Various coping strategies were mentioned: finding value and meaning in their loss, beliefs in an afterlife and being reunited with the child sometime, as well as praying, meditation, and religious worship.

Discussion

Spiritual and religious coping strategies seem to be useful in dealing with the death of a child in unique ways. Bereaved parents find it easier to ascribe meaning to the loss of their child; they pray and meditate, finding solace in reaching out to God, faith communities, and clergy in the midst of a shattering life experience. The rapture of an important ▶ attachment for parents (Bowlby, 1980), their relationship with the child, can activate attachment needs in the spouses that grieve in the same time. As Oliver (1999) explained, "the realization that the partner is unavailable as a source of comfort during an intense crisis can adversely affect the intensity and security of the individual's attachment, and conversely the quality of the marriage" (p. 221).

In line with Oliver (1999), Ungureanu and Sandberg (2010) proposed that the attachment theory can provide a solid foundation for understanding the impact of the death of a child on the parents. These researchers (Ungureanu & Sandberg) further proposed that integrating attachment theory and psychology of religion can offer the basis for incorporating spiritual and religious coping mechanisms and resources in clinical work. In their opinion, the religious coping phenomenon can be seen through the lenses of attachment to God (Kirkpatrick, 1992). According to Kirkpatrick, God of many religions can be conceptualized as a secure attachment figure, a *safe haven* from which individuals derive comfort and a sense of safety in facing life's trials. The closeness to the deity and the comfort individuals with a secure attachment to God experience may function as a coping mechanism in dealing with the death of a child. It may also function as a model for a potentially impaired attachment bond between the partners. More research is needed to clarify the role of spiritual and religious resources in grieving the death of a child.

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Coping with Diagnosis

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Definition

The most widely accepted definition of coping was developed by Lazarus and Folkman (1984) which states coping is a "constantly changing cognitive and behavioral effort to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984). This definition has been applied to coping with chronic illnesses, including cancer. Although cancer has many similarities to coping with other chronic illnesses. Coping with cancer is unique secondary to the potential life threatening nature of such a diagnosis.

Description

Coping involves first the appraisal of internal or external demands placed on the individual followed by the cognitive and/or behavioral efforts to manage these demands that may be appraised as stressful or taxing the individual"s resources. Lazarus and Folkman distinguished between two types of appraisals, primary and secondary appraisal. Primary appraisal is the evaluation of the demands while secondary appraisal involves the individual's assessment of the resources available to the individual (Lazarus & Folkman, 1984).

Coping is believed to have two major functions, regulating stressful emotions (emotion-focused coping) and managing the distress causing the problem (problem-focused coping). Although over 600 coping strategies have been identified and studied, the most common coping strategies that have been the focus of research include: (1) problem-focused versus emotion-focused; (2) engagement versus disengagement; and (3) cognitive versus behavioral coping strategies (Weiten & Lloyd, 2008). Each of these methods can be beneficial given a particular problem; however problem-focused coping strategies have been most often associated better adjustment (Felton & Revenson, 1984). In the context of oncology, in addition to the traditional coping strategies that have been studied, coping styles such as "fighting spirit" and "religious coping" have also examined (Petticrew, Bell, & Hunter, 2002).

The appraisal of a problem and coping with this demand is a dynamic process and if the initial coping strategies employed proves to be ineffective then the individual may reappraise the problem. A new coping response may be employed, possibly producing a new emotional response, which again may result in a new appraisal of the stressor and coping response. The flexibility of an individual in regard to their ability to re-appraise a situation and engage in new coping strategies has been found to be adaptive (Chen, 2001).

While decades of research have been conducted regarding the role of coping and metal health, a paucity of research has been conducted with

regard to coping with a diagnosis of cancer. The stress of being diagnosed with cancer may be different than other types of stressors as it is more often considered a life threatening event. A large literature exists that is associated with the primary appraisal to a diagnosis of cancer, termed illness perception. Illness perception may be defined as how an individual perceives the diagnosis of cancer (e.g., understanding of cause, seriousness, course, and consequences of the illness). Although illness perception has been studied with regard to a diagnosis of cancer, it is rarely studied in combination with coping.

Folkman (2010) has recently described coping with cancer and uncertainty. The concept of illness uncertainty was first introduced by Mishel (1999). Michel defined uncertainty in illness as "the inability to determine the meaning of illness-related events occurring when the decision maker is unable to assign definite value to objects or events and/or is unable to accurately predict outcomes" (Mischel & Clayton, 2003, p. 29). Three major themes included in the uncertainty illness theory (UIT) include: antecedents of uncertainty, appraisal of uncertainty, and coping with uncertainty. Mishel recently reconceptuaized the uncertainty in illness theory (RUIT; Mischel & Clayton) and added to the antecedents the role of "self organization" and "probabilistic thinking" (see Mischel & Clayton, p. 31 for further details). Self organization is described as the structuring of a new sense of order that comes from acceptance of uncertainty as a natural life rhythm and probabilistic thinking as a pattern of thinking incorporating a conditional view of the world.

Folkman has described four types of uncertainty associated with a diagnosis of cancer: (1) temporal uncertainty, (2) event uncertainty, (3) efficacy uncertainty, and (4) outcome uncertainty. Hope is essential for people who are coping with a serious and prolonged psychological stress such as cancer (Folkman, 2010).

The role of coping and mental health has been studied in people diagnosed with cancer. Parle and colleagues observed in a large sample of cancer patients, interviewed 4–8 weeks after diagnosis and then 1 year later, that only appraisal and success of the response resolving the problem significantly predicted the prevention of affective disorders (Parle, Jones, & Maguire, 1996). Parle and colleagues concluded that it was the maladaptive cycle of coping over time that was associated with the development of depressive symptoms in those diagnosed with cancer (Parle et al., 1996).

Research concerning the role of coping and survival from cancer has also been studied. Inconsistent findings regarding the link between coping, recurrence, and/or survival have been reported in the literature. A meta-analysis by Petticrew and colleagues found that most of the studies that investigated a coping and survival focused on the "fighting spirit" (10 studies) or "helplessness/hopelessness" types of coping (12 studies; Petticrew et al., 2002). No significant link was found between coping style, disease-free survival, and overall survival (Petticrew et al., 2002). Positive findings linking coping with survival tended to be confined to small or methodologically flawed studies and studies that lacked adjustment for potential confounding variables (Petticrew et al., 2002). There was little consistent evidence that coping styles plays an important part in survival from or recurrence of cancer (Petticrew et al., 2002).

The use of religion and spirituality as resources or strategies to cope has also been studied in patients with cancer. Religious or spiritual coping may serve multiple functions in long-term adjustment to cancer such as maintaining self-esteem, providing a sense of meaning and purpose, giving emotional comfort and providing a sense of hope (Thune-Boyle, Stygalla, Keshtgarc, & Newman., 2006). In a review of this literature, seven studies found evidence for the beneficial effects of religious coping on adjustment but four studies found that religious coping to be detrimental in a subsample of the population (Thune-Boyle et al., 2006). Three studies found religious coping to increase distress and/or anxiety. Many studies included in the review suffered from methodological problems, especially in the manner in which religious coping were conceptualized and measured (Thune-Boyle et al., 2006). The studies also failed to control for possible influential

variables such as stage of illness and perceived social support therefore conclusions regarding the benefits or harm of this type of coping could not be concluded.

Conclusion

Despite nearly three decades of research concerning coping in the general population, a relatively limited number of studies have been performed concerning coping in the context of cancer. Certain coping strategies have been found to be associated with psychological functioning but few studies have reported a link between coping and medical outcomes such as recurrence or survival despite the messages in the popular press which has focused on the fighting spirit or maintaining a positive attitude to cure cancer. The measurement of coping can challenging as it is a dynamic process and further research with more rigorous designs, methods, and homogenous samples may provide more definitive conclusions regarding coping in regard to psychological and health outcomes in those diagnosed with cancer. At this time in history, coping is not a primary focus of many researchers; coping remains an important area of investigation within the context of cancer.

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Coping, an Overview

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Definition

In general, coping is defined as the cognitive and behavioral efforts to manage internal and/or external demands that are appraised as taxing or exceeding the resources of the person (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984).

Description

The concept of coping encompasses relatively stable coping styles or dispositions that characterize individuals' habitual interactions with their environment, as well as the cognitive and behavioral coping responses or skills individuals employ to manage specific stressful encounters (Moos & Holahan, 2003).

First, dispositional or stylistic coping approaches suggest that relatively stable and enduring personality, attitudinal, and cognitive characteristics underlie habitual coping efforts (Carver & Scheier, 1994). These trait-like, stable

characteristics influence the person's responses to stressful encounters across different situations. What the person usually does under stress is of interest for a dispositional coping style.

On the other hand, situational or contextual approaches regard coping as an ongoing process that changes according to the specific context (Lazarus & Folkman, 1984). These contextual coping approaches assume that more transitory, situation-based factors (e.g., the nature of events such as controllability referring to the extent to which the occurrence of an event is within one's control) shape individuals' cognitive appraisals and their choices of specific coping responses (Folkman & Lazarus, 1985). Coping responses can change from moment to moment depending on the nature and personal appraisal of a stressful transaction, indicating situational coping. This hypothesis addresses the issue of what the person did (or is doing currently) in a specific coping episode or during a specific period of time.

In line with the first, dispositional/stylistic coping approach, Carver, Scheier, and Weintraub's (1989) *Coping Orientation for Problem Experiences* (COPE) includes a dispositional measure of coping that asks individuals how they usually manage stressful life circumstances. The key dimensions of the COPE measure are comprised of problem-focused coping (e.g., ▶ active coping, planning, instrumental social support), adaptive emotion-focused coping (e.g., emotional social support, positive reframing), and potentially maladaptive emotion-focused coping (e.g., denial, mental disengagement, behavioral disengagement). On the other hand, Folkman, Lazarus, and colleagues' (1986) transactional theory of coping is emblematic of the contextual/situational approach to coping. This theory emphasizes the person's cognitive appraisal of the situation (as challenge, threat, and potential benefit or harm), which is assumed to mediate the relationships between life stressors and personal coping responses. In this theory, coping is regarded as a dynamic process that fluctuates over time in response to changing demands and appraisals of the situation.

There is no consensus about relationships between dispositional coping styles and contextual coping strategies. Some researchers consider them overlapping concepts, with dispositional coping determining the choice of contextual coping (Ayers, Sandler, West, & Roosa, 1996; Carver & Scheier, 1994; Ferguson, 2001). Others argue that they represent different phenomena because their determinants and impacts on behavior and mental health differ. Dispositional coping style is a function of personality/trait, whereas specific demands of stress influence the contextual coping strategies (Moos & Holahan, 2003; Moos, Holahan, & Beutler, 2003; Moos & Schaefer, 1993). Overall, dispositional coping and contextual coping are related, but not redundant or completely overlapping constructs (Moos & Holahan, 2003). Aldwin (1994) suggested that dispositional coping predicts one's long-term function of coping, while situational/contextual coping is related to short-term function of it.

Despite the evidence for coping as a process and the impact of situational/contextual factors on coping, it is important to realize that exact strategies employed are highly variable from person to person (Folkman & Lazarus, 1985). In addition, Lazarus and Folkman (1984) suggest that person-centered characteristics are influential to coping at the most basic level. For example, they recognize that emotion-focused coping tends to be related to person-centered characteristics; for example, some people are not able to cognitively reduce their ▶ stress or ▶ anxiety, while others are. In addition, the concept of cognitive appraisal creates the possibility that some people will appraise events to be more threatening or more amenable than others. Moreover, different people may employ diverse behavioral styles to cope with the same situation (Folkman & Lazarus, 1985). All of the above illustrate the complexity of coping processes, mechanisms, and outcomes.

One major recent development in the stress-coping literature represents a meaning-making function of stress-coping, whereby that people gain important meanings (e.g., personal, social, spiritual, cultural) from the process of coping with stress (see Park, 2010). Akin to the

distinction between a dispositional model and a situational or contextual model of coping, this meaning-based coping model differentiates between global meaning (the person's general orientation toward stress-coping) and situational meaning (in the context of a particular environmental encounter). Similar to a situational or contextual model of coping, appraised event meaning (the way the individual appraises a stressful event and assigns meaning to it) is considered to influence the process and outcome of meaning-based coping. Also introduced into the stress and coping model are future-oriented coping, interpersonal coping, and religious and spiritual coping, whereas the scope of coping has been broadened to include the regulation of positive as well as negative emotion states (Folkman, 2011).

Key future consideration for this area of research includes social and cultural aspects of stress-coping, personal and environmental factors that either facilitate or inhibit effective stress-coping, and the development and testing of interventions especially for vulnerable population groups, all of which have implications for meaning-based coping in the context of adjustment to stressful or traumatic life events (Park, 2010). For example, in addition to immediate social environments, the broader cultural context in which the person is situated seems to have a strong impact on the role of stress-coping and meaning-making in her/his life. Consequently, this macro-level cultural context appears to play a key role in better understanding the facilitators and inhibitors of positive stress-coping and meaning-making, which have important implications for intervention approaches. Since vulnerable population groups such as indigenous peoples and ▶ ethnic minorities, families under ▶ poverty or with ▶ low income, and families that have persons with disability are great risk of poor mental health, focusing on and helping those groups in our research effort are very important. Furthermore, examining cause-and-effect relationships between coping and ▶ health is essential (Folkman, 2011). Folkman's (2011) recent volume/handbook of stress and coping features critical discussion on two primary coping research topics: mitigating stress-related harms and sustaining ▶ well-being in the face of stress.

Cross-References

- ▶ Coping with an Unjust World
- ▶ Coping with Child's Death Using Spirituality and Religion
- ▶ Coping with Diagnosis
- ▶ Spirituality and Coping in Patients with Schizophrenia
- ▶ Stress Reactivity
- ▶ Ways of Coping Checklist

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Coping, Belief in God and Child's Death

► Coping with Child's Death Using Spirituality and Religion

Copyright Issues on Standardized Measures

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Definition

Intellectual property (IP) refers to creations of the mind: inventions; literary, scientific, and artistic works; and symbols, names, images, and designs used in commerce (World Intellectual Property Organization [WIPO], 2004). IP is divided into two categories: industrial property, which includes inventions (patents), trademarks, industrial designs, and geographic indications of source, and copyright, which includes literary, scientific, and artistic works. The importance of protecting intellectual property was first recognized in the Paris Convention for the Protection of Industrial Property (1883) and the Berne Convention for the Protection of Literary and Artistic Work (1886). Both treaties are administered by the World Intellectual Property Organization (WIPO).

Description

The Berne Convention

The Berne Convention was implemented in 1886 to protect, in a manner as effective and uniform as possible, the rights of authors in their literary, scientific, and artistic works (Berne Convention for the Protection of Literary and Artistic Work, 1886). It is an international agreement that sets out to harmonize the way that copyright is regulated at an international level. The Convention requires its signatories to recognize the copyright of works of authors from other signatory countries (known as members of the *Berne Union*) in the same way it recognizes the copyright of its own nationals.

The Berne Convention has four main principles: (1) national treatment, (2) preclusion of formalities, (3) minimum terms of protection, and (4) minimum exclusive rights:

- National treatment: Under the Berne Convention, an author's rights are respected in any signatory country as if he were a citizen of that country (Art. 5(1)). For example, works by US authors are protected by French copyright in France, and vice versa, because both the USA and France have signed the Berne Convention.
- Preclusion of formalities: Under Berne, copyright cannot be dependent on formalities such as registration or copyright notice (Art. 5(2)). This means that the work of an author is protected "de facto" from the moment of its creation. In other words, the attainment of copyright on a document is automatic. There is no obligation to register the work.
- Minimum terms of protection: Under Berne, the minimum duration for copyright protection is the life of the author plus 50 years (Art. 7(1)). Signatory nations may provide longer durations.
- Minimum exclusive rights: Under Berne, a nation must provide for protection of six rights: paternity (Art. 6bis(1)), integrity (Art. 6bis(1)), translation (Art. 8(1)), reproduction (Art. 9(1)), public performance (Art. 11(1) and Art. 11ter), and adaptation (Art. 12).

To summarize, the Berne Convention stipulates that copyright is automatic (it belongs to the "creator" of the work – no registration is needed) and

gives the copyright holder exclusive rights that are divided into two main categories: authorization and moral rights. Authorization rights include the right of translation, the right of reproduction, the right of adaptation, and the right of public recitation. Moral rights are the right to claim authorship of the work (paternity right) and the right to object to any mutilation, deformation, or other modification of, or other derogatory, action in relation to the work (integrity right) which would be prejudicial to the author's honor or reputation.

In addition to the Berne Convention, national copyright laws must be considered with attention. For instance, US copyright law does not quite align with the Berne Convention, which requires that the paternity and integrity rights endure for the same term as the other rights (Art. 6bis(2)), while in the USA, those rights terminate at the death of the author (17 U.S.C. 106A(e)) (Copyright Office, 2007). The two are reconciled by the premise that other sources of federal law, such as trademark, combined with the trademark, unfair competition, and defamation laws of the individual states, satisfy these requirements.

Transfer of Rights

The laws of many countries stipulate that the owner of the initial rights (i.e., the creator of the work) may transfer all economic rights to a third party (moral rights, being personal to the author, can never be transferred). Authors may sell the rights to their works to individuals or companies best able to market the works, in return for payment. These payments are often made dependent on the actual use of the work and are then referred to as royalties.

Transfers of copyright may take one of two forms: assignments and licenses:

- Under an assignment, the rights owner transfers the right to authorize or prohibit certain acts covered by one, several, or all rights under copyright. An assignment is a transfer of a property right. So if all rights are assigned, the person to whom the rights were assigned becomes the new owner of copyright.
- In some countries, an assignment of copyright is not legally possible, and only licensing is allowed. Licensing means that the owner of the copyright retains ownership but authorizes a third party to carry out certain acts covered by his economic rights, generally for a specific period of time and for a specific purpose.

In the end, the copyright holder is not always the author of the work, and specific attention must be paid to copyright ownership by future users of the work.

Public Domain

Public domain is a contrast to copyright. A work that is found within the public domain can be freely used by anyone for any purpose. A work may be public domain in a number of ways.

For instance in the USA:

1. The copyright may have expired. The duration of the copyright is the life of the author plus 70 years (17 U.S.C 302) (Copyright Office, 2007).
2. The work may be for instance a work of the US government, and such works cannot be copyrighted.
3. If the work was published before the implementation of the Berne Convention (i.e., before 1st March 1988) and does not contain a copyright notice, that copyright would be considered to be forfeited, and therefore the work would be public domain.

Note: The Berne Convention eliminated the requirement of copyright notice on documents. Berne was implemented by the USA by virtue of the Berne Convention Implementation Act, 1988. Public Law (P.L) 100-568, 102 statutes at large (stat.) 2853.

How Do Laws About Intellectual Property Apply to Standardized Measures?

The Berne Convention and the national laws on intellectual property fully apply to standardized measures since they are "creations of the mind" and scientific works. In other words, this is the copyright holder of the questionnaire who will control its access (distribution, reproduction), its adaptation or modification, and its translation.

Very little information, however, has yet been published or presented on copyright and standardized measures (Anfray, 2009; Anfray & Emery, 2006; Anfray & Emery, 2007a; Anfray & Emery,

2007b; Anfray & Emery, 2008; Anfray, Eremenco, Patrick, Conway, & Acquadro, 2010; Revicki & Schwartz, 2009). Although the Berne Convention is clear about the rights of the copyright holder, it is less clear about how this person may be identified. While the Convention states that the copyright holder is the creator of the work, there are situations where more than one person may qualify for this definition. This is particularly true in the field of social and medical research where the copyright of a questionnaire may be claimed by different parties during the life cycle of an instrument (Anfray & Emery, 2006; Anfray & Emery, 2007a). Two typical situations can be observed: (1) At the time of development, the copyright may be claimed by the researcher or alternatively by the sponsor of the project; (2) At the time of the publication or press release about the questionnaire, the copyright might be transferred partially or fully to the publishers in which case the original copyright holder may involuntary lose his "authorization" rights. In addition, the process of adapting or translating a questionnaire poses an even more complex problem in so far as the translators – once they have received permission to translate from the original copyright holder – may claim the copyright of the translated version. In summary, copyright is situation specific. It is therefore crucial that the copyright be defined in writing from the outset. Finally, the use of a standardized measure in medical product development is linked to the ability of the user to justify its choice and document its properties. This is clearly stated by regulatory bodies such as the FDA and the EMA, in particular when using a patient-reported outcome measure to support a labeling claim (European Agency, 2006; US Department of Health. Food and Drug Administration, 2009). In order to meet these regulatory requirements and in the light of experience, the following recommendations are offered to developers and users of such measures:

Recommendations for Authors

- Standardized measures must be protected for scientific purposes: Copyright helps to protect the integrity of the questionnaire.
- Copyright ownership should not be confused with royalty fees and therefore not seen as an obstacle to easy access and use: Copyright does not prevent free access and use of a questionnaire.
- Because case laws differ, the ownership of standardized measures should be defined in the beginning between all parties involved, and each step of the questionnaire's life, including distribution, should be anticipated for purpose of copyright.
- All agreements should be stated in writing.
- Copyright of the standardized measure and its derivatives should be exclusively owned by a unique entity.
- Central control of distribution facilitates access to questionnaires and information about them.
- Developers are advised to register their work in their country of residence to avoid contestation of ownership. A posteriori proof of ownership is always difficult.

Recommendations for Users

- Since the implementation of the Berne Convention and in the countries it governs, all standardized measures are protected de facto. Conditions of access must always be checked prior its use.
- License/user agreements should be established in written form.
- Time should be anticipated for licensing specifically for international trials.

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Core Affect

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Synonyms

Homeostatically protected mood; Trait affect

Definition

The term core affect refers to a neurophysiological state experienced as a basic feeling.

Description

The term core affect was coined by Russell (2003, 2009) to describe a neurophysiological state experienced as a basic feeling. He describes it as analogous to felt body temperature in that it is always there, it can be accessed when attention is drawn to it, extremes are most obvious, and it exists without words to describe it. Naturally enough, Russell regarded core affect in the context of the circumplex model of affect (Russell, 1980), comprising a blend of hedonic (pleasant-unpleasant) and arousal values (activation-deactivation).

Even though it is described in two-dimensional space, core affect is experienced as a single blended feeling. This is possible because the hedonic and arousal dimensions are proposed to be statistically independent. That is, arousal is an independent construct, not merely the intensity (a component) of hedonic tone (Barrett & Bliss-Moreau, 2009). When two dimensions are unrelated, it is possible to experience their presence at the same time. Hence, any point on the circumplex will be simultaneously felt as a blend of hedonic tone and arousal.

A central aspect of core affect is its presence in both emotions (acute affect generated by some percept and involving cognition) and mood (chronic affect generated automatically without a percept). Following Oatley and Johnson-Laird (1987), Russell (2003) considers that an emotion linked to a percept is an amalgam of two processes. First is an attribution of affective quality directed at the percept in terms of its pleasant-unpleasant and activating-deactivating character. This is a "cold" (unemotional) perception which is made "hot" (emotional) by being combined with a *change in* core affect. Thus, changed core affect is central to all emotion-laden percepts.

Despite its centrality in emotions, in its simplest and pure form, core affect comprises a non-reflective mood, defined as "prolonged core affect without an object" (Russell & Barrett, 1999, p. 806). It is always present and is represented as a single point that moves about within the circumplex, with such movements or changes in core affect, driving emotional responses to percepts. As such, core affect can vary in intensity and stability. Intensity varies directly with the rapidity and extent of change from one point to another. If core affect is intense, then it can be the focus of consciousness; when it is weak it recedes into the conscious background.

Russell (2003) also considered pure core affect to be the simplest psychological feeling: "The subjective experience is simple and primitive and therefore irreducible to anything else psychological" (p. 148). Similarly, it was described as the "core of affect" (Yik, Russell, Ahn, Fernandez Dols, & Suzuki, 2002). Importantly for the rest of this story, while any change in core affect was considered to be often accompanied by a plethora of specific expressive and instrumental actions, physiological changes, and cognitive processes, "we do not assume that these other ingredients are necessarily universal [ingredients within emotions]" (Yik et al., p. 90). This collective view of core affect became far more complex over the following decade.

A Changed View of Core Affect

Russell's more contemporary views of core affect have enhanced the complexity and centrality of core affect, not only to emotions but also more broadly to much of human experience. Indeed, in this new expanded view, core affect is only an optional feature of emotion Russell (2009), p. 1265, being a necessary feature only of "prototypical emotions" involving pleasant or unpleasant hedonic tone. In this revised view, the simple trait-like property of core affect has been virtually abandoned and the emphasis has shifted to "psychological construction." This is an umbrella term for a host of mechanisms that purport to explain not only emotions but a much larger set of psychological components which "includes the components of any specific emotion (such as facial movement, vocal tone, peripheral nervous system change, appraisal, attribution, behaviour, subjective experience, and emotion regulation); (b) associations among the components; and (c) the categorization of the pattern of components as a specific emotion" (p. 1259). So inclusive is the concept of psychological construction that many of its components "have no name" (p. 1279).

In sympathy with this move to place core affect at the heart of multiple psychological processes, Barrett views core affect within the context of her Conceptual Act Model (e.g., Barrett, 2009). This constructionist model proposes that an emotion word, like "fear," represents an emotion category. The purpose of such categories is to allow the brain to continuously categorize and monitor sensory stimuli in broad, adaptive terms. She then proposes that emotion categories can be described through the interaction of three basic elements as memory about the emotion, controlled attention, and core affect. This version of core affect is synthesized through the integration of sensory information from external receptors, together with internal homeostatic and interoceptive information, to form a basic affective code or state of being (Barrett & Bliss-Moreau, 2009). This code reflects the constantly changing stream of sensory input. Together with memory and attention, it shapes the mental events that emerge as emotions and so informs the organism about the flow of changing life conditions (Barrett, Mesquita, Ochsner, & Gross, 2007).

In this view, changes in core affect comprise a "core affective reaction" to an object or stimulus "directing the body to prepare for some behavioral response toward that object" (Barrett, 2009, p. 383). Such core affective feelings are experienced as a single unified percept, such as we experience in color (Yik, Russell & Steiger, 2011). This stream of core affect can be experienced as either a foreground or background feature of consciousness, depending on where attention is directed. When in the background it functions as weak feelings or emotions which indirectly color conscious experience.

When core affect is foregrounded, it can be experienced directly as pleasant or unpleasant content and can serve as information for making explicit judgments and decisions (Schwarz & Clore, 1983).

Unsurprisingly from this description, she regards core affect as backgrounding every cognition and perception (Barrett, 2009). It also backgrounds what people consider to be nonemotional events and is, thus, a fundamental feature of consciousness. Somewhat curiously, however, given this complexity, core affect continues to be viewed by Barrett as a "psychological primitive" (Barrett & Bliss-Moreau, 2009) and an individual difference.

The Purpose of Core Affect [Active vs. Passive]

From the above description, it is clear that the conception of core affect has changed markedly from Russell's (2003) original conception. Various critiques have been offered in relation to the contemporary views of core affect (see Frijda, 2009), but one of particular relevance is its simultaneous description as both a "psychological primitive" and as a highly complex interactive system (see Yik et al., 2011). This seems contentious since primitive systems are generally characterized by simplicity not complexity. In sympathy with this principle, a new conception of core affect has emerged modeled on Russell's earlier views.

Even though Russell did not discuss a relationship between core affect and ▶ Subjective Well-being (SWB), for other researchers the connection seemed potentially useful as an explanation for SWB stability. An emerging understanding is that SWB is held for each person within a narrow set-point range. The existence of an "equilibrium level" was first proposed by two Australian researchers, Headey and Wearing (Headey, Holmstrom, & Wearing, 1984a, b; Headey & Wearing, 1989). Using data from a panel study, they observed that in the absence of significant life events, people tended to maintain a relatively steady level of SWB and that if an event caused SWB to change, then, over time, it tended to regain its previous level. They called this their "Dynamic Equilibrium Model" and considered the management of SWB to be vested in a genetically inbuilt psychological system. They supposed that this system was based in stable personality characteristics, which had the primary purpose of maintaining ▶ self-esteem at a positive level. They characterized the positive sense of SWB as a "sense of relative superiority" because it had the consequence of making people feel that their subjective life experience is better than average for the population.

The first researcher to examine core affect and personality in terms of their relative capacity to capture SWB variance was Davern (2004). From a pool of 31 affects, representing the octants of the circumplex, she found only 6 made a significant, unique contribution to general life satisfaction (GLS). These comprised content, happy, energized, satisfied, stressed, and pleased. Collectively, these six affects accounted for 64 % of the variance in GLS, and given their relative contributions to this variance, Davern concluded that SWB judgments mainly comprise pleasant affect.

In a subsequent study, Davern, Cummins, and Stokes (2007) used these six affects together with the seven discrepancies of Multiple Discrepancies Theory (▶ MDT: Michalos, 1985) and extraversion and neuroticism (Costa & McCrae, 1980) in a hierarchical regression to predict SWB (▶ Personal Well-being Index: Cummins, Eckersley, Pallant, Van Vugt, & Misajon, 2003). She found that core affect explained 66 % of the variance, MDT contributed a further 2 %, while personality failed to make a significant contribution. A subsequent revision of this model identified a more parsimonious measure of core affect, which reduced the number of affects from six to three (happy, content, and excited) (Davern et al., 2007). Structural equation modeling found that 90 % of the variance in SWB was contributed by these three affects, with a small contribution from MDT (Michalos, 1985) and none from personality.

This was the first demonstration that affect, not personality, may be the dominant determinant of life satisfaction and SWB. These findings have essentially been replicated by Blore, Stokes,

Mellor, Firth, and Cummins (2011) and Tomyn and Cummins (2011).

Homeostatically Protected Mood

Davern had been attracted to use Russell's term "core affect" because the combination of the three affects she had discovered seemed appropriate to describe an enduring, pleasant, mildly activated mood state, which could be biologically determined. However, Russell had also described core affect as changing in response to percepts and so creating emotion. The form of core affect envisioned by Davern et al. (2007) was rather different. While they also regarded their version of core affect as a biologically influenced mood, they saw this as unchanging, being uninfluenced by percepts. They also considered these affects to describe a form of enduring, positive-activated ▶ mood that was defended by Subjective well-being Homeostasis (Cummins, 1995, 2010). Thus, a new term was required that described a basic, unchanging form of mood affect, and the term Homeostatically Protected Mood (HPMood) was coined (Cummins, 2010) to describe a feeling state with the following characteristics:

1. It is a biologically determined positive mood that comprises the most basic experienced feeling. It is hardwired for each individual, comprising the tonic state of affect that provides the activation energy, or ▶ motivation, for behavior.
2. HPMood is both the dominant affective constituent of SWB and also the basic steady-state set point that homeostasis seeks to defend. On average, it is set at a level of 75 points on a 0 (dissatisfied)–100 (satisfied) scale (Cummins, 2010).
3. HPMood perfuses all higher process, including personality, memory, and momentary experience. It perfuses all cognitive processes to some degree but most strongly the rather abstract notions of self (e.g., I am a good person). These self-perceptions are normally held at a chronic strength of positivity that approximates the set-point HPMood.

Consistent with this fundamental role, we hypothesize that the process of evolution has advantaged the survival of individuals who experience a level of HPMood corresponding to 70–80 points pleasant or positive. Notably, SWB values above and below this range are associated with different forms of cognitive functioning, which each has their own advantages and disadvantages. For example, higher SWB is associated with enhanced friendliness and problem solving (Lyubomirsky, Sheldon, & Schkade, 2005) but has the downside of poor information processing, an exaggerated sense of control, and therefore enhanced risk taking. Lower SWB, on the other hand, leads to more careful information processing (for a review see Forgas, 2008) and greater preparedness for threat (Sweeny, Carroll, & Sheppard, 2006) but carries the risk of low motivation and even depression if it becomes chronic. Thus, we propose that 75 points is a trade-off between the advantages and disadvantages of higher and lower values. This level then, on average, constitutes the optimum set-point range for SWB, corresponding to the most adaptive range of mood affect.

In summary, there are now two terms to describe the concept of core affect. The original, coined by Russell, describes a neurophysiological state represented as a single, movable point within the circumplex. The purpose of pure core affect is to represent a neutral mood base comprising the hedonic and activation axes, with deviations within the circumplex experienced as emotional responses to percepts. The alternative construct, Homeostatically Protected Mood, is also seen as a neurophysiological state but one that is unchanging, with the level being genetically determined for each person as an individual difference. It is mildly positive and activated, serving to provide the basic activation motivation for behavior, and is proposed to be defended by the processes of Subjective well-being Homeostasis.

Cross-References

- ▶ Affective Component of Happiness
- ▶ Hedonic Adaptation
- ▶ Homeostasis
- ▶ Mood
- ▶ Subjective Well-Being

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Core DFS

▶ Flow Scales

Core FSS

▶ Flow Scales

Core Needs

▶ Basic Needs

Coronary Thrombosis

▶ Acute Myocardial Infarction

Corporate Responsibility

▶ Business Ethics

Corporate Social Responsibility

▶ Business Ethics
▶ Collective Responsibility

Corporate Taxes

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Definition

Corporate ▶ taxes are direct taxes levied by the government on the profits accruing to businesses. The level of corporation taxation is important to a firm because it determines the amount of after-tax profits which is available to pay out dividends to shareholders or to reinvest it in the business (Pass, Lowes, Pendleton, & Chadwick, 1991). Corporate taxes are direct taxes both in the legal sense that corporation is an individual in the eyes of the law and in the economic sense that corporation is owned by its shareholders so that a tax on the corporation is a tax on them (Lipsey, 1993).

Description

Taxes are of major importance in the pursuit of many governmental policies. Corporate taxes can be one of the largest cash outflow that a firm experiences. Corporate taxation is determined through the tax code of each country. Many times the various rules of taxation and tax code are the results of political, not economic forces. Broadly speaking, when taking financial decisions in order to promote ▶ social welfare, it is important to distinguish among average, marginal, and flat corporate tax rate. Average tax rate is tax bill divided by taxable income or the percentage of profits that goes to pay taxes. Marginal tax rate is the extra tax that a company would pay if earned one more dollar. With a flat tax rate, there is only one tax rate, and this is the same for all income or profit levels (Ross, Westerfield, & Jordan, 1993).

Government uses taxes to raise revenue to finance government spending on social goods such as schools, hospitals, roads, to promote social equity by ▶ redistribution of income and to regulate fiscal policy. Illegal efforts from corporations to avoid paying taxes or to evade taxes by various means can cause serious economic, security, and social consequences such as those relevant with money laundering (CAMS, 2007):

(a) Loss of control of, or mistakes in, decisions regarding economic and ▶ social policy
(b) Instability and economic distortion
(c) Loss of tax revenue, making government tax collection more difficult
(d) Reputation risk for the country

Discussion

The fiscal climate affects the ▶ quality of life across metropolitan areas (Gyourko & Tracy, 1991). But always there will be a discussion about the appropriate level of corporate taxes to promote social welfare. A lower corporate tax would increase the pace at which corporate capital gains were realized, raising revenues directly as well as through the increased ▶ economic growth arising from more efficient mobility of capital (Reynolds, 1990). The possibility that a cut in the rate of corporate tax might increase tax collections and government funds to

improve welfare is widely known by a curve called the Laffer curve which supports that increases in tax rates beyond some level will decrease rather than increase corporate tax revenue.

Cross-References

- ▶ Economic Growth
- ▶ Quality of Life
- ▶ Redistribution of Income
- ▶ Social Policy
- ▶ Social Welfare
- ▶ Taxes

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Correlated Data Analysis

- ▶ Longitudinal Data Analysis

Correlates of War (COW)

- ▶ Measures of National Power

Correlation Coefficient

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Definition

The correlation coefficient is the most widely used measure of the goodness-of-fit of a relationship between two or more variables. It is most frequently used in linear regression models using interval and ratio data, but a wide range of coefficients are available for use with different types of data and relationships.

In a bivariate linear regression, the correlation coefficient usually deployed is the Pearson's product–moment correlation – normally denoted as r_{yx}; the correlation of y on x. It is derived as the ratio between the variance in the observed values and the variance in the residual values on the dependent variable.

The graph shows a linear regression involving five observations (one would not normally fit a regression with just five points; the small data set is used here for illustrative purposes); the regression equation is:

$$y = 1.20 + 0.80x$$

The actual values for each observation, and the estimated values for y ($y(\hat{y})$) from the regression are in the first three columns below:

	x	y	$\hat{y}$	$(y-\bar{y})$	$(y-\bar{y})^2$	$(y-\hat{y})$	$(y-\hat{y})^2$
1	2	4	2.8	−2	4	−3.2	10.24
2	4	2	4.4	−4	16	−1.6	2.56
3	6	6	6.0	0	0	0.0	0.0
4	8	10	7.6	+4	16	+16	2.56
5	10	8	9.2	+2	4	+3.2	10.24
Σ					40		25.6

The squared correlation between x and y (r_{yx}^2) is the ratio between the variation in y without the regression line being fitted (i.e., around the mean

for y; $\sum (y - \bar{y})^2$ and the variation around the regression line (i.e., $\sum (y - \hat{y})^2$)). That is 25.6/40 = 0.64, as shown in the later columns of the above table. The correlation between x and y (r_{yx}) is the square root of that – 0.80.

Correlations vary between −1.0 and +1.0; negative correlations refer to a negative regression equation (i.e., the slope is downward to the right, indicating that as the values of x increase, those of y decrease). The squared value – sometimes referred to as the coefficient of determination – is interpreted as the proportion of the variation in y that can be accounted for by the variation in x, in this case 0.64 or 64 %. (In causal terms, 64 % of the variation in y can be explained by variation in x.)

In multivariate linear regression, the multiple correlation coefficient is usually denoted as R and the coefficient of determination as R^2.

Apart from the product–moment correlation coefficient used for regressions involving interval and ratio data, a wide range of others are available. For correlations involving ordinal data, for example, two coefficients, Spearman's rank order correlation coefficient (*rho*, ρ) and Kendall's rank order correlation coefficient (tau, τ) are generally used. In bivariate logistic and multinomial regressions, one of Nagelkerke's R^2, Cox and Snell's R^2 or McFadden's R^2 is used: All have the same goal and interpretation – indicating the proportion of the variation in y that can be accounted for by one or more x variables (i.e., the closer the fit of the regression plane to the data points).

Cross-References

▶ Zero-Order Relationships

References

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Correlation of Ordinal Variables

▶ Rank-Order Correlation

Correlation Ratio or R^2

▶ Eta Squared

Corrupt Governments

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Definition

Since corruption within government is about the abuse of public power, the definition of the World Bank is the most appropriate:

Corruption is the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests (World Bank).

The definition by Transparency International is broader:

Corruption is the abuse of entrusted power for private gain. This is the working definition used by Transparency International (TI), applying to both the public and private sectors (Transparency International).

Description

Methodology: The Global Corruption Barometer Index (CGB Transparency International)

The World Bank uses the Global Corruption Barometer Index about the perception of

corruption by the abuse of public power as one of its sources to assess the (lack of) control of corruption in nations. This index is presented by Transparency International each year. This Index (since 2003) is based on a representative survey of more than 70,000 households in nearly 90 countries on people's perceptions and experiences of corruption.

Ratings GCB

1. The Global Corruption Barometer (GCB) is based on three questions:
   (a) In the past 3 years, how has the level of corruption in this country changed? (% decreased, same, increased)
   (b) To what extent do you perceive the following institutions in this country to be affected by corruption? (1, not at all corrupt, to 5 extremely corrupt)
   (c) How would you assess your government's current actions in the fight against corruption? (% ineffective, neither, effective)

The most recent Global Corruption Barometer can be found at http://archive.transparency.org/policy_research/surveys_indices/gcb. This index is used by the World Bank to assess control of corruption in nations.

Methodology: The Global Integrity Index (GII)

Another source of information about the control of corruption by governments, also used by the World Bank, is the Global Integrity Index, organized by Global Integrity, an institute supported by a mix of charitable foundations, governments, multilateral institutions, and the private sector (Global Integrity). This Index assesses the existence, effectiveness, and citizen access to key national-level anti-corruption mechanisms used to hold governments accountable. The Index does not measure corruption. Rather than examine the "cancer" of corruption, the Index investigates the "medicine" being used against it – in the form of government accountability, transparency, and citizen oversight.

The Global Integrity Index is generated by aggregating more than 300 Integrity Indicators systematically gathered for each country covered. For the Global Integrity Index: 2009, those indicators comprised more than 100,000 peer-reviewed questions and answers scored by in-country experts. Several rounds of review are conducted at the international level to ensure that cross-country comparisons are valid. In addition, all assessments are reviewed by a country-specific, double-blind peer review panel comprising additional local and international subject matter experts.

Ratings Global Integrity Index

Unlike most governance and corruption indicators, the Global Integrity Report mobilizes a highly qualified network of in-country researchers and journalists to generate quantitative data and qualitative reporting on the health of a country's anti-corruption framework. Each country assessment contained in the Global Integrity Report comprises two core elements: a qualitative Reporter's Notebook and a quantitative Integrity Indicators scorecard, the data from which is aggregated and used to generate the cross-country Global Integrity Index.

An Integrity Indicators' scorecard assesses the existence, effectiveness, and citizen access to key governance and anti-corruption mechanisms through more than 300 actionable indicators. It examines issues such as transparency of the public procurement process, media freedom, asset disclosure requirements, and conflicts of interest regulations. Scorecards take into account both existing legal measures on the books and de facto realities of practical implementation in each country. They are scored by a lead in-country researcher and blindly reviewed by a panel of peer reviewers, a mix of other in-country experts as well as outside experts. Reporter's Notebooks are reported and written by in-country journalists and blindly reviewed by the same peer review panel.

Reports and data can be found at http://www.globalintegrity.org/report.

Cross-References

► Corruption
► Indicators, Quality of Life

References

Global Integrity: http://www.globalintegrity.org/
Transparency International: http://www.transparency.org/
World Bank: http://data.worldbank.org/

Corruption

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Synonyms

Bribe payers index (BPI); Corruption perceptions index (CPI); Global corruption barometer (GCB); Global corruption report (GCR); Global integrity index (GII); National integrity system (NIS)

Definition

By Transparency International:

Corruption is the abuse of entrusted power for private gain. This is the working definition used by Transparency International (TI), applying to both the public and private sectors.

In the definition of the World Bank, corruption is limited to the abuse of public power:

Corruption is the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Description

Methodology Transparency International

Each year TI presents three reports about corruption:

1. Since 1995, the Corruption Perceptions Index (CPI): capturing informed views of analysts, business people, and experts in nations around the world. The 2011 Index measures the perceived levels of public sector corruption in 183 countries and territories around the world. The CPI focuses on corruption in the public sector or corruption which involves public officials, civil servants, or politicians. The data sources used to compile the index include questions relating to the abuse of public power and focus on bribery of public officials, kickbacks in public procurement, embezzlement of public funds, and questions that probe the strength and effectiveness of anti-corruption efforts in the public sector. As such, it covers both the administrative and political aspects of corruption. In producing the index, the scores of countries/territories for the specific corruption-related questions in the data sources are combined to calculate a single score for each country (▶ 2011 Corruption Perceptions Index).
2. Since 2003, the Global Corruption Barometer (GCB): a representative survey of more than 70,000 households in nearly 90 countries on people's perceptions and experiences of corruption. The most recent Global Corruption Barometer can be found at http://archive.transparency.org/policy_research/surveys_indices/gcb. This index is used by the World Bank to assess control of corruption in nations.
3. Since 1999, the Bribe Payers Index (BPI): a ranking of leading exporting countries according to the perceived likelihood of their firms to bribe abroad. The most recent BPI can be found at http://archive.transparency.org/policy_research/surveys_indices/bpi. The BPI looks at which industrial sectors are the worst offenders. This index is based on the views of thousands of senior business executives from developed and developing countries, focusing on the business practices of foreign firms in their country. The ▶ 2011 Bribe Payers Index ranks 28 of the world's largest economies according to the perceived likelihood of companies from these countries to pay bribes abroad. These countries cover all regions of the world and represent almost 80 % of the total world outflow of goods, services, and investments. The 2011 report examines different types of bribery across sectors – including, for the first time, bribery

among companies ("private-to-private" bribery). The 2011 Bribe Payers Index report draws attention to the role that both the private and public sectors can play in tackling this issue. It also makes a number of actionable recommendations, for both businesses and governments, on how they can strengthen their efforts to make substantial progress in reducing the prevalence of foreign bribery around the world.

Occasionally TI presents reports about specific subjects:

1. Global Corruption Report (GCR): a thematic report that explores corruption with regard to a specific sector or governance issue. The report provides expert research and analysis as well as case studies. The most recent Global Corruption Report can be found at http://archive.transparency.org/publications/gcr.
2. National Integrity System assessments (NIS): a series of in-country studies providing an extensive assessment of the strengths and weaknesses of the key institutions that enable good governance and integrity in a country (the executive, legislature, the judiciary, and anti-corruption agencies among others). For a full list of reports and more information on the National Integrity System model, please see http://archive.transparency.org/policy_research/nis.

Ratings Transparency International

1. The Corruption Perceptions Index (CPI) ranks countries/territories based on how corrupt their public sector is perceived to be. A country/territory's score indicates the perceived level of public sector corruption on a scale of 0–10, where 0 means that a country is perceived as highly corrupt and 10 means that a country is perceived as very clean. A country's rank indicates its position relative to the other countries/territories included in the index. No region or country in the world is immune to the damages of corruption. The vast majority of the 183 countries and territories assessed for 2011 score below 5 on a scale of 0 (highly corrupt) to 10 (very clean).
2. The Global Corruption Barometer (GCB) is based on three questions:
   (a) In the past 3 years, how has the level of corruption in this country changed? (decreased, same, increased)
   (b) To what extent do you perceive the following institutions in this country to be affected by corruption? (1, not at all corrupt, to 5 extremely corrupt)
   (c) How would you assess your government's current actions in the fight against corruption? (ineffective, neither, effective)
3. On the Bribe Payers Index (BPI), nations are scored on a scale of 0–10, where a maximum score of 10 corresponds with the view that companies from that country never bribe abroad and a 0 corresponds with the view that they always do.

Methodology: The Global Integrity Index (GII)

Another source of information about the control of corruption by governments, also used by the World Bank, is the Global Integrity Index, organized by Global Integrity, an institute supported by a mix of charitable foundations, governments, multilateral institutions, and the private sector. This Index assesses the existence, effectiveness, and citizen access to key national-level anti-corruption mechanisms used to hold governments accountable. The Index does not measure corruption. Rather than examine the "cancer" of corruption, the Index investigates the "medicine" being used against it – in the form of government accountability, transparency, and citizen oversight.

The Global Integrity Index is generated by aggregating more than 300 Integrity ▶ Indicators systematically gathered for each country covered. For the Global Integrity Index: 2009, those indicators comprised more than 100,000 peer-reviewed questions and answers scored by in-country experts. Several rounds of review are conducted at the international level to ensure that cross-country comparisons are valid. In addition, all assessments are reviewed by a country-specific, double-blind peer review panel comprising additional local and international subject matter experts.

Ratings Global Integrity Index

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An Integrity Indicators' scorecard assesses the existence, effectiveness, and citizen access to key governance and anti-corruption mechanisms through more than 300 actionable indicators. It examines issues such as transparency of the public procurement process, media freedom, asset disclosure requirements, and conflicts of interest regulations. Scorecards take into account both existing legal measures on the books and de facto realities of practical implementation in each country. They are scored by a lead in-country researcher and blindly reviewed by a panel of peer reviewers, a mix of other in-country experts as well as outside experts. Reporter's Notebooks are reported and written by in-country journalists and blindly reviewed by the same peer review panel.

Reports and data can be found at http://www.globalintegrity.org/report.

Cross-References

- ▶ Bribe Payers Index (BPI)
- ▶ Corruption Perception Index
- ▶ Corrupt Governments
- ▶ Indicators, Quality of Life

References

Bribe Payers Index: http://www.transparency.org/research/bpi/overview.
Corruption Perceptions Index: http://www.transparency.org/research/cpi/overview.
Global Corruption Barometer: http://www.transparency.org/research/gcb/overview.
Global Corruption Report: http://archive.transparency.org/publications/gcr.
Global Integrity Index: http://www.globalintegrity.org.
National Integrity System: http://transparency.ie/resources/NIS.

Corruption Perception Index

▶ Reporting of Indices by the Press

Corruption Perceptions Index (CPI)

▶ Corruption

COSMIN: Consensus-Based Standards for the Selection of Health Status Measurement Instruments

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Synonyms

Definitions of measurement properties; Methodological quality of studies on measurement properties; Studies on measurement properties, appraisal tool; Taxonomy of measurement properties

Definition

The COSMIN (COnsensus-based Standards for the selection of health status Measurement INstruments) checklist can be used to evaluate the methodological quality of studies on measurement properties, for example, in systematic reviews of measurement properties. In these

systematic reviews it is important to take the methodological quality of the selected studies into account. If the results of high-quality studies differ from the results of low-quality studies, this can be an indication of bias.

The COSMIN checklist was developed in a Delphi study, involving over 40 international experts in measuring health. It contains standards for design requirements and preferred statistical methods of studies on the measurement properties of health measurement instruments. The checklist can be used to assess whether a study on measurement properties meets the standards for good methodological quality. Note that it is not a checklist to assess the quality of a measurement instrument.

Description

The COSMIN initiative aims to improve the selection of health measurement instruments. As part of this initiative, the COSMIN group performed a Delphi study in which we developed a critical appraisal tool (a checklist) containing standards for evaluating the methodological quality of studies on the measurement properties of health measurement instruments (Mokkink, 2010).

The research questions of the Delphi study were:

1. Which measurement properties should be included in the assessment of evaluative HR-PROs, and how should they be defined?
2. How should these measurement properties be assessed in terms of study design and statistical analysis (i.e., standards)?

The focus was on health-related patient-reported outcomes (HR-PROs), but the checklist is also useful for evaluating studies on other kinds of health measurement instruments, such as performance-based instruments or clinical rating scales.

Methods

Based on a systematic review of systematic reviews of measurement properties, an inventory was made of terms, definitions, and standards of measurement properties (Mokkink, 2010). In addition, existing methodological criteria lists were collected. This information was used in the Delphi study in which we developed the COSMIN checklist, the taxonomy of measurement properties, and a list with definitions of each relevant measurement property (www.cosmin.nl).

The COSMIN Checklist

The COSMIN checklist was developed in an international Delphi study as a multidisciplinary, international collaboration with all relevant expertise involved (Mokkink, 2010). Forty-three panel members participated in at least one of the four written rounds. The panel was asked to give their opinion on questions about relevance of measurement properties, preferred terms and definitions, and appropriate design requirements and statistical methods. (Dis)agreement was rated on a 5-point scale (strongly disagree, disagree, no opinion, agree, strongly agree). We encourage the panel to give arguments for their choices. Consensus was considered to be reached when the rating of at least 67 % of the panel members indicated "agree" or "strongly agree" on the 5-point scale. If less than 67 % agreement was reached for a question, we asked it again in the next round, providing pro and contra arguments given by the panel members, or we proposed an alternative. If no consensus was reached, the Steering Committee took the final decision.

The checklist contains 12 boxes. Items included in the boxes are about study requirements and preferred statistical methods. The checklist and instructions for using the checklist are available at www.cosmin.nl.

Ten boxes can be used to assess whether a study meets the standard for good methodological quality. Nine of these boxes contain standards for studies on measurement properties (boxes A to I), and one box contains standards for studies on interpretability of HR-PRO instruments (boxes J). Examples of standards are "Was an internal consistency statistic calculated for each (unidimensional) (sub) scale separately?" "Were the administrations

independent?" for reliability and measurement error studies, and "Can the criterion used or employed be considered as a reasonable 'gold standard'?" for a study on criterion validity. The number of standards per box ranges between 5 and 18.

Interpretability is not considered a measurement property but nevertheless an important characteristic of a HR-PRO instrument and is therefore included in the checklist. In addition, two boxes are included in the checklist that contain general requirements for articles in which IRT methods are applied (IRT box) and general requirements for the generalizability of the results (generalizability box), respectively.

In short, when applying the COSMIN checklist, the first step is to determine which measurement properties are evaluated in the article under study. Second, when IRT is used, the IRT box should be completed. Third, each box of the measurement properties evaluated in the study should be completed, and fourth, the generalizability box can be completed to determine to with population the results can be generalized.

Items in the COSMIN checklist can either be rated with "yes" or "no." When all items are scored "yes," the methodological quality of the study is excellent. However, often one wants to differentiate between the methodological quality of studies, for example, in a systematic review of measurement properties. Therefore, a scoring system has been developed, which can be used in systematic reviews of measurement properties to obtain a quality rating per COSMIN box (Terwee et al., 2011). With this system, the methodological quality of studies on measurement properties is rated on a 4-point rating scale: excellent, good, fair, or poor. This rating system was developed based on discussions in the Clinimetrics working group of the EMGO Institute for Health and Care Research (www.clinimetrics.nl) as well as on the application of this rating system to rate the quality of all studies on measurement properties described in 46 articles on neck disability questionnaires (Schellingerhout et al., 2011).

A Taxonomy and Definitions

In the COSMIN Delphi study also a taxonomy of relevant measurement properties was developed and we reached consensus on definitions of each measurement property (Mokkink, 2010). The taxonomy contains three quality domains, that is, reliability, validity, and responsiveness. All measurement properties are included in one of these domains.

Quality of the COSMIN Checklist

Inter-rater reliability and agreement were assessed of each item of the checklist. Results ranged widely (Mokkink, 2010).

The COSMIN checklist can be used in a systematic review on measurement properties or as guidance for designing or reporting a study on measurement properties. Students can use the COSMIN checklist when learning about measurement properties. Reviewers or editors of journals can use the COSMIN checklist to appraise the methodological quality of submitted studies on measurement properties and to check whether all important design aspects and statistical methods have been clearly reported.

Note that the checklist focuses on the methodological quality of studies on measurement properties, and not on the quality of a measurement instrument itself. This means that in the checklist, items like "was the time interval appropriate?" and "were hypotheses regarding correlations or mean differences formulated a priori?" were included. When one wants to assess the quality of an instrument, the results of those studies need to be evaluated, for example, whether a Cronbach alpha was above 0.70. Within the COSMIN study, these criteria were not developed.

We expect that consensus reached in this study will lead to a more uniform use of terms and definitions in the literature on measurement properties and transparent methods used when assessing the quality of studies on measurement properties. Lack of consensus has lead to confusion about which measurement properties are relevant, which concepts are represented, and how these measurement properties should be assessed in terms of design requirements and preferred statistical methods.

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Cosmopolitanism

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Definition

The contradictory and paradoxical understandings of what constitutes cosmopolitanism reveal not only moral fragmentation and the increasing lack of consensus around what constitutes "the good life" but also provide examples of the multiple meanings behind the term "cosmopolitanism" itself as both a socially elite status that can be purchased and as a potentially emancipatory concept of "world citizenship" committed to reducing, not increasing, forms of social exclusion.

Description

The term cosmopolitan contains its own inherent contradictions, since it contains both elite and egalitarian pretensions. On the one hand, to describe someone as "cosmopolitan" implies that they are "worldly" and "sophisticated" and are a globally conscious person with wide international experience, a concept which has been critiqued because it presumes entitlement to an elite social and occupational status and various material and bureaucratic privileges (Calhoun, 2003). Cosmopolitanism is historically linked to the quasi-colonial expansion of urban centers or metropolitan regions in the nineteenth century as a legitimation of their encroachment on geopolitically dispersed or vulnerable outlying territories (Simmel, 1997). On the other hand, the ancient Greek philosophers used this term derived from *cosmos* (world) plus *polis* (city, people, citizenry) to describe a (potentially) more egalitarian concept of "world citizenship," understood as a universal love of humankind as a whole, regardless of nation. The more emancipatory understandings of cosmopolitanism understood as "world citizenship" have been recently revived by theorists such as Habermas (2001) and Held (2004), who are attempting to develop a version of "cosmopolitan citizenship" which can provide a moral and political framework of universal rights and political consensus which could challenge neoliberal globalization. Such authors are concerned with the pursuit of the former definition of cosmopolitanism as social distinction, as opposed to the latter as global citizenship or inclusion. For them, the former results in an impoverished notion of cosmopolitanism that is in danger of reducing quality of life in a range of national and regional contexts.

Formulations of cosmopolitanism take account of the limits of the nation-state to adequately provide a framework for global governance and collective ► solidarity in a context where globalization has irrevocably transformed political, economic, and cultural life. Attempts to formulate economic cosmopolitanism have been focused around the issue of how to regulate global markets in a context where the radical excesses of the global economy escape the control of a regulatory state. Political cosmopolitanism is driven by the need to maintain social standards and involves attempts to democratize decision-making structures at a variety of levels, including macro-level debates on how to implement more responsible supranational regulatory structures (such as a reformed General Assembly of the United Nations) and micro-level debates on local democracy which look, for instance, to the

Zapatista revolt as an example of political cosmopolitanism. Cultural cosmopolitanism is the consolidation of political identities based on a sense of principles of universality rather than purely based on particularity and what involves the hermeneutic move of being able to "take the role of the other." All these types of cosmopolitanism aspire to the idea that the world can be seen as a unified community in which individuals from different regions enter into reciprocal and mutually beneficial relations based on respect and reciprocity despite the range of political, cultural, and religious differences.

The term cosmopolitanism is inextricably intertwined with the concept of globalization and the extent to which globalization has had a negative impact on quality of life in some domains. Much of the current debate on cosmopolitanism shows how global neoliberal political economy stands in need of the institutions of cosmopolitan society, cosmopolitan citizenship, and global democracy. The new exclusions produced at a global level highlight the need for a new, strong, and more utopian "cosmopolitics" in global society that could transcend the narrow economism of state policy in some global contexts. Current formulations of cosmopolitanism are not without their problems, however, for many commentators have shown how both theories of cosmopolitanism and theories of multiculturalism are often based on individualistic and social ontologies and are proposed within a narrow framework which presumes a culture of privilege. Calhoun (2003), for instance, argues that the unself-reflexive celebration of mobility and nomadicism apparent in many conceptions of cosmopolitanism presumes entitlement to an elite social and occupational status and to various material and bureaucratic privileges – privileges not available to the majority of world citizens. He also argues that many theories of cosmopolitanism discriminate against the local and contain an elitist conception of identity as choice, excluding involuntarily localized or racialized individuals whose identities are ascribed or imposed identities and who are perhaps most in need of a strong cosmopolitics.

This notion of cosmopolitanism is very utopian and is aspirational rather than an inevitability of history. The notion of cultural cosmopolitanism is particularly precarious, since it is distinctly at odds with deeply held national, ethnic, and religious traditions, evidenced by the rise of new fundamentalisms in America and the resurgence of the right in Europe. Cultural cosmopolitanism involves the detaching or disembedding of identities from particular times, places, and traditions and involves principles of unfixity, hybridity, and impurity. To Habermas (2001), for instance, cosmopolitanism involves a "politics of recognition" whereby the identity of each individual citizen is woven together with collective identities and must be stabilized in a network of mutual recognition. Insofar as it celebrates nomadicism and hybridity, some versions of cosmopolitanism have been critiqued for their cultural imperialism and for the tendency to falsely represent the particular standpoint of an elite and mobile social status as the universal standpoint which overlooks the material privileges not available to the majority of world citizens. Nonetheless, many authors agree that we need points of identification and solidarity at a postnational level to both tame globalization and to find a framework for global solidarity beyond what we have now. Perhaps we need to view cosmopolitanism as a kind of a provisional, temporary ideal and as a concept which "views the common good as a 'vanishing point,' as something to which we must constantly refer when we are acting as citizens, but which can never be reached" (Mouffe, 1991, p. 379). The cultivation of a cosmopolitan imaginary can perhaps operate as a basis of solidarity with other groups contesting various aspects of neoliberal globalization through what Laclau and Mouffe (1985) call "hegemonic articulatory practices" with various antiglobalization movements. Perhaps such broader coalitions are necessary to guide a new political imaginary and to contest the prioritization of economic growth over social solidarity that is part of the so-called New World Order.

Cosmopolitanism is also associated with an ideal of a disembedded, transcendental reason which transcends the particular national and regional contexts and thus is subject to critique on this basis. This model of the transcendental, knowing subject which emerges from enlightenment

epistemology has been critiqued insofar as it represses materiality (Butler, 1993) and represses the body (Bordo, 1990), which fixes the knower in space and time. This modern epistemic subject, in Bordo's words, denies itself a body that would situate it and "claims to descend from the heavens of pure rationality or reflect the inevitable and progressive logic of intellectual or scientific discovery" (Bordo, 1990, p. 137). In light of the fact that all knowledge claims have a point of origin, are located in history and in culture, and are in minute ways influenced by the race, class, or gender of the knower, Haraway (1991) has argued that we should replace this notion of transcendental knowing subject with the recognition that all knowledges are "situated knowledges" (p. 183). In accordance with this, Gibbons (2002), following Appiah, argues that we need a "rooted cosmopolitanism" – a cosmopolitanism which is rooted in, rather than in denial of, one's own national experience – for it is only in coming to terms with the past that one is able to empathize with the other. Such a "rooted cosmopolitanism" in global society would acknowledge the extent to which national identity can perhaps be said to be "rooted" in a largely shared experience of the past. Yet as national subjects, we increasingly occupy multiple subject positions and a variety of temporalities simultaneously, for these categories themselves are overlapping, multivarious, and uneven.

At the same time, globalization, migration, and bi- and multinational identities means we experience a sense of "in-betweenness" or a sense of moving in and out of multiple and overlapping temporalities. As Bhabha (1994, p. 3) says, "our existence today is marked by a tenebrous sense of survival, living on the borderlines of the 'present', for which there seems to be no proper name, other than the current and controversial shiftiness of the prefix 'post.'" In this creative space of "in-betweenness," there is the potential to develop a sense of double (or multiple) vision, for it is often in the liminal spaces at interstices or borders where the "overlap and displacement of domains of difference ... that the intersubjective and collective experiences of nation-ness, community interest, or cultural value are negotiated" (Bhabha, 1994, p. 3). In Bhabha's work liminality itself signifies the "realm of the beyond," and this "in-between" space/time, these borders or thresholds, can potentially cut across divisions or dichotomies of the past. Perhaps a grounded cosmopolitanism that acknowledges shared experiences of the past based on "nation," but that accepts the "in-betweenness" of the present under conditions of globalization, would be the best model with which we could ground a cosmopolitanism that could facilitate postnational solidarities with others within the world system.

Habermas takes up a particularly strong position on the issue of cosmopolitanism and its links with the concept of ▶ human rights. In *The Postnational Constellation*, Habermas shows how things have become much more complicated since the eclipse of the nation-state by globalization. Over the past century and a half, he argues, "the national basis for civic solidarity has become second nature, and this national foundation is shaken by the policies and regulations that are required for the construction of a multicultural civil society" (Habermas, 2001, p. 74). In the postnational constellation, not only can this national basis for civic solidarity no longer be relied upon but it also actually becomes part of the problem. Habermas has conceded to postmodern theory that reason is de-transcendentalized and situated. But, Habermas argues, "from the correct premise that there is no such thing as a context-transcendent reason, postmodernism draws the false conclusion that the criteria of reason themselves change with every new context" (p. 148). Therefore, Habermas says, despite the assertion of an "incommensurability of different paradigms and the rationalities peculiar to them" (p. 149), universal pragmatics and the ideal speech act continue to be among the best resources at our disposal for the critique of ideology and for the evaluation of discourse leading to morally binding consensus. The more abstract foundation of morality/social solidarity in the postnational constellation becomes concretized, or embodied, in human rights. He argues that "human rights, i.e., legal norms with an exclusively moral content, make up the entire

normative framework for a cosmopolitan community" (Habermas, 2001, p. 108). In the modern nation-state, solidarity is based on the particularity of collective identities, on "shared" histories and traditions, while in Habermas' postnational constellation, "cosmopolitan solidarity has to support itself on the moral universalism of human rights alone" (p. 108).

A key issue for cosmopolitan theorists is the emerging body of empirical and theoretical work exploring the relationship between quality of life and the issue of ▶ inequality and redistribution. As such, the debate between Axel Honneth (1995) and Nancy Fraser (Fraser & Honneth, 2003), commonly referred to as the recognition/redistribution debate, is relevant to the issue. Honneth, a German philosopher and critical theorist, argues that the fundamental grammar of social conflict in modern society is the struggle for recognition. The issue of inequality and health has been demonstrated with abundant clarity by the epidemiological and public health studies by the contemporary English epidemiologists Michael Marmot (2004) and Ian Wilkinson (2005). In separate, extensive, and complimentary empirical studies of health statistics, Marmot and Wilkinson provide the empirical quantitative data that demonstrates the diseases and morbidity resulting from the simultaneous psychological and physiological injuries of misrecognition and maldistribution. The empirical evidence is unambiguous: societies and social arrangements that have more equal distribution of social goods and greater parity of recognition are healthier and happier than those with sharper polarities. The common matrix of parity of recognition and social equality is progressive taxation and generous provision of universal public services – education, health care, housing, and social security.

In the twenty-first century context of globalization, this matrix of social integration and solidarity is disassembled as a result of an increase in a range of social inequalities (Bauman, 1998; Beck, 2000; Mishra, 1999), which has a profoundly negative impact on quality of life. Economic activity is increasingly conducted in a global market, and the national revenue apparatus cannot control this activity. The revenue base for its redistributive functions is sharply contracted. Some models of cosmopolitan citizenship are trying to establish a version of citizenship rights that follows the principles of both recognition and redistribution and does not discriminate against individuals on the basis of where they were born or how much they are worth. Habermas claims that the current "postnational constellation" means that global mobility and economic nonaccountability mean that nation-states can no longer offset the negative social effects of globalization. This may not be enough for in Habermas' (2001) view, what we really need is a "global domestic policy" which can curtail the radical exploitation of transnational corporations as well as tax "loopholes" through offshoring.

Similarly, Held (2004) argues we need a multilevel global "covenant" that could impose mandatory labor and environmental standards, globally established and mandatory codes of conduct for transnational corporations, and a new international tax mechanism that takes account of global mobility. Other diverse political debates imply that the terrain of the political should not be formalized or in a "global covenant" that could itself become subsumed into the neoliberal globalizationist hegemony and that a true project of cosmopolitan and radical democracy must adhere to more micropolitical, anti-universalist political strategies. All of these debates around cosmopolitanism are explicitly concerned with improving the quality of life of individuals and societies at a supranational as well as a national level. However, they define, evaluate, measure, and prioritize different indicators of quality of life (such as freedom, human rights, and happiness) in many different ways.

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Cost Performance Index (CPI)

► Cost-Efficiency Indicators

Cost-Benefit Analysis

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Synonyms

Benefit-Cost Analysis, CBA

Definition

CBA is a framework employed to assess all of the social and private costs and benefits of a project (program, scheme, intervention, or policy) with the aim to determine whether, and eventually to what extent, the project is desirable from the social welfare point of view. To this end all costs and benefits must be quantified and converted into monetary values, in order to calculate the project's net benefit to society as a whole. CBA is used in ex-ante evaluation as a tool for policy makers to select alternative projects or to decide whether a specific scheme is worthwhile for society. It can be also employed ex-post to quantify the net social worth of a fully implemented specific program.

Description

CBA is a normative procedure involving making value judgments for policy interventions. Accordingly, CBA has its roots in ► welfare economics, a branch of economics that deals with ethical propositions in order to determine the desirability of a particular policy or allocation of resources (Boadway & Bruce, 1984). In this context, the aim of CBA is to maximize ► social welfare, and it may be said that CBA considers as a social objective the "potential Pareto improvement criterion" or "Kaldor-Hicks compensation criterion" (Sudgen & Williams, 1978). This says that a project should be undertaken if the value of the gains for the gainers exceeds the costs of the losses for the losers, such that the gainers could *potentially* compensate the losers. CBA also requires that the gains (benefits) of a project should be measured by the maximum sum of money that beneficiaries would be willing to pay to have it, and the losses (costs) are evaluated by the minimum sum of money that losers would be willing to accept as compensation for putting up with it. This means that CBA employs measures of consumer's surplus as indicators of changes in individual's welfare and that criticisms about consumer surplus as a measure of changes in welfare are, likewise, criticisms

about the welfare fundamentals of CBA (Mishan & Quah, 2007).

On these bases, CBA develops a framework which consists of the following stages (de Rus, 2010; European Commission, 2008):

1. Identification of the project and relevant alternatives
2. Financial analysis
3. Physical quantification of socioeconomic impacts
4. Monetary valuation of quantified impacts
5. Discounting flows of social benefits and costs to calculate the economic return of the project
6. Analysis of distributional issues
7. Sensitivity analysis

These steps are described below from an ex-ante perspective, taking into account that in an ex-post context CBA employs the actual project's costs and benefits instead of expected or planned costs and benefits which would emerge from the project implementation:

1. First of all, it is necessary to identify the project by also obtaining in-depth understanding of how it will be implemented. This implies a clear definition of its socioeconomic objective(s) and the population whose welfare is to be considered. In this sense, it is not desirable to define projects with too broadly scope, hiding real separable projects, or to define projects too narrowly, giving planning autonomy to parts or phases belonging to a real larger project. This step is very important to ensure the technical feasibility of the project and also to present the relevant alternatives aimed at the same defined objective(s) (including the do-nothing and do-minimum options).
2. It is also important for the viability of the project to ensure its financial feasibility. With this purpose, it is necessary to first define the project's life cycle and then the income *(I)* and expenditure *(E)* breakdown over the entire project's time span. Afterwards, the discounted cash-flow method is used, employing the appropriate financial discount rate *(i)*, in order to express future cash-flow values as current (present) monetary terms, and to calculate the financial net present value *(FNPV)* of the project. For practical purposes, and assuming that inflation affects all the prices equally, *(i)* is a nominal interest rate (more precisely, the ▶ opportunity cost of capital). FNPV is calculated by subtracting the present value of expenditure from the present value of income generated by the project. This can be done employing the following expression:

$$\mathrm{FNPV} = \sum\nolimits_{t} \left[(\mathrm{I_t} - \mathrm{E_t}) / (1 + \mathrm{i})^{t} \right] \qquad (1)$$

In expression (1) $(I_t - E_t)$ is the generated cash for each year *(t)* and *(T)* is the project time horizon. If FNPV is negative, or even for just 1 year the generated cash flow is negative, the financial sustainability of the project is not guaranteed. In this case, it would be necessary to modify the financial structure of the project, when dealing with projects that admit the possibility of charging users, or to look for additional sources of financing to cover the negative financial result.

3. The next step is the identification of the costs and benefits of the project to society, including when they will occur in time. These costs and benefits embrace all significant inputs and outputs of the project, including impacts affecting markets other than the one where direct effects are produced, and the possible direct external effects. These external effects (or externalities) are the project's real benefits and costs affecting the welfare of economic agents (individuals or firms), which are not captured by market mechanisms.
4. Once identified and quantified in physical terms, inputs and socioeconomic effects generated by the project must be expressed in a common denominator, money being considered the most appropriate. The costs of the inputs employed in a program is the value of these resources in their most valuable alternative use (i.e., their opportunity cost). In addition, when estimating monetary values for imperfect-market goods (namely, when market price does not reflect the opportunity cost of goods and services) or nonmarket goods (i.e., goods not exchanged in the market

and as a result no prices are available for them), the analyst has to estimate social costs and benefits in monetary terms by using shadow (or accounting) prices. In the first case, shadow prices frequently differ from prevailing market prices because they have to reflect the real costs of inputs and the real benefits of the project's outputs to society. In the case of nonmarket goods (externalities, public goods, etc.), the analyst has to reconstruct the market mechanism to measure the individuals' willingness to pay to avoid a cost or to obtain a benefit by using, for example, revealed preferences methods or contingent valuation methods. In addition, given that ▶ taxes are money transfers between economic units (they represent neither a benefit nor a cost for society as a whole), when market prices are employed it is important to take into account taxation, eliminating all fiscal effects on prices.

5. Then, to ex-ante assess the project the researcher calculates the project's economic net present value *(ENPV)*, discounting all future costs *(C)* and benefits *(B)* (expressed at constant, base year, prices) by using a social discount rate *(r)* and the expression (2).

$$\mathrm{ENPV} = \sum_t \left[(B_t - C_t)/(1+r)^t\right] \qquad (2)$$

The social rate of discount reflects the social preference for present benefits and costs against future benefits and costs, and, generally, it differs from the private discount rate. The question of the selection of the appropriate social rate of discount in project appraisal has been subject to great controversy (Stiglitz, 1994). In this regard, for example, it is expected that social discount rates will differ between developed and developing countries: a higher discount rate for lagged countries might reflect the need to invest in projects that are more socially worthwhile. Thus, the project is judged to be worthwhile to society if ENPV is positive. This criterion is also appropriate when choosing between mutually exclusive projects (when it is only possible to implement one). However, when several projects all meet the ENPV criteria and they are not mutually exclusive (i.e., it is possible to implement more than one), the benefit-cost ratio *(BCR)*, expression (3), provides decision criteria which complement the ENPV, when there is a limit on the funds to invest (i.e., they are less than the sum of total costs of all projects for which ENPV is positive).

$$\mathrm{BCR} = \left\{\sum_t \left[B_t/(1+r)^t\right]\right\} \Big/ \left\{\sum_t \left[C_t/(1+r)\right]^t\right\} \qquad (3)$$

It is important to note that BCR is not suitable as a decision rule for mutually exclusive projects and it is sensitive to the classification of the projects' effects as benefits rather than costs.

6. The role of CBA in economic analysis is to search for ▶ economic efficiency. However, given that CBA provides an account of who is expected to lose and gain as a result of project completion, it is desirable from a social well-being perspective to incorporate distributional concerns into the CBA framework. In other words, given that society in general is not neutral with respect to changes in ▶ income distribution among people, the analyst should find a way to incorporate distributional criteria into the CBA's objective function. Otherwise, to ignore these distributional changes implies accepting the initial income distribution as socially preferred. Theoretically, in order to introduce income distribution considerations into CBA, it is necessary to start from a social welfare function to compare social states. In practical terms this implies identifying a set of different weights for costs and benefits affecting different groups of people (Pearce & Nash, 1981).
7. Producing a single ENPV figure for every project would be misleading due to the existence of uncertainty. For this reason it is advisable to recalculate ENPV

based on alternative scenarios, assuming that key values might change (such as discount rates, shadow prices or project time horizon), or to develop a risk analysis assigning probabilities to the various components of the scheme (Arrow & Lind, 1970).

In sum, CBA is an aid to decision-making; it is not a mechanical practice for making decisions. One of its major strengths is that it allows the creation of a project ranking (including the do-nothing and do-minimum cases). However, the problems linked to forecasting and monetization of external effects, with data inputs subject to inaccuracies, are serious limitations of this technique. For these reasons CBA requires a high degree of accuracy and consistency in its application.

Cross-References

- ▶ Decision Making
- ▶ Economic Efficiency
- ▶ Income Distribution
- ▶ Monetary Measures of Value
- ▶ Opportunity Cost
- ▶ Social Welfare
- ▶ Taxes
- ▶ Unemployment
- ▶ Welfare Economics

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Cost-Effectiveness Analysis

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Synonyms

CEA

Definition

CEA is a decision-making framework used to compare programs with similar or equal objective(s), based on both their costs and their effectiveness in obtaining a specific outcome which is already considered worthwhile. CEA is used to select which alternative program maximizes effectiveness at a given level of cost or, alternatively, minimizes the cost of obtaining a given level of effectiveness. In this context, the measure of effectiveness must be expressed in physical units, while the measure of costs is the money value of all the resources assigned to the program. For this reason, CEA is often employed to select interventions in ▶ education and health, where the outcome cannot be easily given a value in money terms. However, in contrast to ▶ cost-benefit analysis (CBA), CEA does not provide an assessment of whether a program is worthwhile in an absolute sense.

Description

When decision-makers have to allocate scarce resources among alternative interventions having

the same objective, all the costs and effects of feasible alternatives have to be considered. In this context, CEA is a tool to select alternative interventions which involves the following steps (Levin & McEwan, 2001):

1. Definition of program objectives
2. Identification of alternatives
3. Measurement of the effects of programs in natural units
4. Estimation of total costs in money terms
5. Calculation of cost-effectiveness ratios

Firstly, the expected outcomes of each intervention must be carefully identified, given that CEA is only helpful when programs have the same objective and this outcome can be measured with a common metric. Ideally, the implementation of CEA is straightforward as a tool for the comparison of alternatives only when it is possible to express an intervention's effectiveness using a single dimension. Nevertheless, in the case of interventions with multiple objectives, there are suitable analytical tools such as cost-utility analysis (weighted cost-effectiveness analysis) and multicriteria analysis (Rossi & Freeman, 1993). Once the relevant alternatives have been identified, the effect of these interventions on the common outcome must be measured in units of effectiveness. This calculation also involves taking into account the time needed for each alternative to deliver its full effect and the possible uneven distribution of this effect across different groups of individuals. The analysts must then sum, in money terms, the costs of *all* the resources required to implement the program, expressing future values as present monetary terms, as is current practice in CBA. Finally, effectiveness and cost data are combined to calculate the cost-effectiveness ratio, which gives the average monetary cost of obtaining an outcome unit for each intervention. At this point, the following caveats apply: Firstly, estimates of costs and effectiveness will be recalculated employing sensitivity analysis methods (scenario analysis or risk analysis). Second, care must be taken when comparing interventions of different size, given that the relationship between cost and effectiveness would be not linear within specific programs. This could eventually change the calculated cost-effectiveness ratio. Drummond, O'Brien, Stoddart, and Torrance (1997) and Levin and McEwan (2001) provide an excellent revision of CEA applications in health and education.

Cross-References

- ▶ Comparative Analysis
- ▶ Cost-Benefit Analysis
- ▶ Decision Making
- ▶ Education

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Cost-Efficiency Farrell Indexes

- ▶ Cost-Efficiency Indicators

Cost-Efficiency Indicators

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Synonyms

Cost performance index (CPI); Cost-efficiency Farrell indexes; Economic performance indicator

Definition

A cost-efficiency indicator deals with the amount of output produced in relation to

a given amount of resources/inputs. It is used as a measure to address the question of how many resources/inputs were deployed per unit of produced output. Usually resources/inputs include labor, capital, and intermediate inputs, while primary cost-efficiency measures include total costs per unit of output. The economic performance indicator is included in this category of indicators. The cost performance index (CPI) refers to the methods and/or instruments employed to measure the actual cost-efficiency of a project.

Description

In index number theory (Diewert, 1993), we may distinguish between the set of indexes that are defined as differences and the set of indexes that are defined as a ratio (Diewert & Nakamura, 1993). The first set is called indicators, while the second set is referred to as indexes. In relation to measures of cost-efficiency, the index approach corresponds to Farrell (1957) cost-efficiency, while the indicator approach is new (Fare, Grosskopf, & Zelenyuk, 2004a, b). Recently, Fare et al. (2004a) have compared cost-efficiency Farrell indexes (which are ratio measures) and cost-efficiency indicators (which are difference measures) with respect to aggregation properties. As they argue, both measures can be aggregated from firm to industry level. However, in the presence of technical and allocative efficiency components, aggregation is not that simple (Fare & Zelenyuk, 2002, 2003; Simar & Zelenyuk, 2007), especially for the index measures, and thus the indicator approach is preferred to the index approach with respect to aggregation (Fare et al., 2004a, b). In general, cost-efficiency indicators measure the amount of inputs required in order to produce a unit of output. Cost-effectiveness indicators also belong in this category of measures and deal with the relationship between sales and inputs, i.e., they are measures of inputs exploited by unit of consumption (sales revenues).

The cost performance index (CPI) refers to the methods and/or instruments employed to measure the actual cost-efficiency of a project. Some typical definitions of the cost performance index include:

(a) A cost performance index "CPI" is the cost-efficiency factor representing the relationship between the actual costs expended and the value of the physical work performed.
(b) A cost performance index "CPI" is the ratio of work accomplished versus work cost incurred for a specified time period. The CPI is an efficiency rating for work accomplished for resources expended.
(c) A cost performance index "CPI" is the ratio of budgeted costs to actual costs. CPI is often used to predict the magnitude of a possible cost overrun by dividing it into the original cost estimate.

In general, the cost performance index is usually defined as the ratio of earned value (EV) to actual costs (AC). If the ratio takes a value that is greater than one, then the conditions of cost-efficiency for the project are considered to be favorable or else the costs are running under budget. If the ratio takes a value that is less than one, then the conditions of cost-efficiency for the project are considered to be less than favorable or the costs are running over budget. The cost performance index can change over the life of a project depending on the fluctuations of earned values and actual cost.

Cross-References

▶ Values

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Cottage Industry (Historically)

► Home-Based Work

Counseling

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Synonyms

Career development; Career guidance; Clinical counseling; Counseling education; Counseling psychology; Group therapy; Guidance; Marriage and family therapy; Psychotherapy; Substance abuse counseling; Therapy

Definition

Twenty-nine different organizations dedicated to the advancement of the counseling practice and profession formulated and endorsed the following definition: "Counseling is a professional relationship that empowers diverse individuals, families, and groups to accomplish mental health, wellness, education, and career goals" (American Counseling Association, 2010).

Description

Counseling History

Arguably, counseling is one of the world's oldest professions (Torrey, 1972). The ancient Greeks identified psychological ailments as treatable, with remedies and cures in the form of relaxation, retreats, and guidance. Modern counseling has a diverse historical lineage, from child and career guidance to individual and social well-being movements. In terms of individual well-being, the late nineteenth and the early twentieth centuries saw the genesis of modern psychotherapy taking form with Sigmund Freud (1920) and the Vienna Psychoanalytic Society, a group of preeminent theorists and psychotherapists (e.g., Jung, 1968; Adler, 1927). In terms of child and career guidance, the Social reform movements of the early twentieth century and the development of child guidance programs were both beginning to broaden counseling's applications in schools and the broader community. Child guidance programs and clinics were implemented to support children's development and provide community mental health services (e.g., Adlerian child guidance clinics in Vienna [1918], Chicago's child guidance clinic [1938]). Vocational and career guidance programs and theories acknowledged the importance of identifying skills and competencies for supporting the individual and the workforce (e.g., Bureau of Vocational Guidance [1905], Parson's Trait and Factor Theory of Career Development [1909]). By the mid-twentieth century, there were different contributing disciplines, each with their own unique histories, objectives, and identities. For counseling practitioners, several evolutions transformed therapy practices with individuals who were in need of remedial services for psychological challenges. In opposition to the psychoanalytic contributors above, behavioral therapy and cognitive behavioral therapy (CBT) were founded on empirically supported psychological principles, such as classical, operant, and respondent conditioning (e.g., Beck, 1979; Ellis & Dryden, 1997); with intensive and consistent research programs, these therapies have gained prominence in remedial counseling and therapy fields. Additionally,

counselor educators and career developers emphasized prevention, education, and development over the life span, with life transitions being a focus (e.g., Super's Life Span and Life Space Approach [Super, 1957]). Importantly, there were two critical movements informing each of the counseling disciplines: the work of Carl R. Rogers (1961) and the inclusion of multicultural, diversity, and social contexts for understanding the human condition and experience. First, the Rogerian or person-centered approach transformed the therapeutic relationship itself, by positioning the client, not the technique or the counselor, at the center of the relationship and the counseling process. The Rogerian core conditions of unconditional positive regard (i.e., acceptance of the person), congruence, and empathy are considered integral to the therapeutic alliance between the client and counselor, regardless of the counseling discipline. Second, the uniqueness and complexity of culture and diversity of clients and their social contexts have become necessary considerations in both the theory and practice of counseling (D'Andrea & Heckman, 2008). In summary, counseling is a broad domain of health and human services with long histories shared across many fields (e.g., counseling psychology, school counseling, mental health counseling, pastoral counseling, counselor education, marriage and family counselors, substance abuse counselors, career development, and child guidance, to name a few).

Counseling Services

As shown above, counselors serve clients presenting with a wide range of health and life goals, and across a broad variety of contexts. Mental or physical health, career/vocational/educational development, social or relationship, life adjustment or transitions, consultation, assessment, and well-being initiatives are some service areas. Counselors provide services for developmental, remedial, preventative, educational, or enhancement goals (Van Hesteren & Ivey, 1990); these goals can be identified by the client, formulated by the counselor, or collaborated on between the counselor and client. Counseling can occur with individuals of all ages, and with couples, families, or groups. These services occur in many different contexts: schools, universities, agencies, prison or parole settings, hospitals, career agencies, religious institutions, or counseling offices or clinics. In North America, like other health services, counselors are guided by ethical codes and registration/licensing bodies, which inform both practice and services provided.

Counseling Processes

The client and counseling relationship are considered central to the counseling process. Many methods or modalities can be used to facilitate or support positive change and growth. Counselors can explore and try to understand how the past is impacting current functioning, or how the present is maintaining and escalating difficulties. A skills-based approach or a strengths-based approach can be taken, with problem-solving and decision-making as key counseling features and the enhancement of resiliency and achievement as goals. Understanding and exploring the self, with an application of this self-knowledge into applied settings, can also be facilitated through counseling. Developmental tasks and disturbances can be included as considerations for change (Van Hesteren & Ivey, 1990). Future expectations, projected realities, and well-being goals also can be counseling objectives to work toward. Intrapersonal (e.g., cognitions, emotions, spirituality, behaviors, skills, personality typologies), interpersonal systems (e.g., family, groups, community), developmental or life span trajectories, or holistic and multisystems approaches can be the foci of exploration and change. Additionally, some counseling researchers and theorists have posited common-factor explanations for change, which span counseling theories and approaches to look at the common features between them (Lambert & Bergin, 1994; Miller, Duncan, & Hubble, 1996). In general, counselors apply various theoretical frameworks to conceptualize and support/facilitate the client's change and objectives. Thus, counselors use a large variety of theories, skills, and strategies from which to approach the goals presented by the clients.

Counseling Research

Research into the effects of counseling across populations and problems show positive results in the areas of self-esteem, self-concept, interpersonal relations, mental health, decision-making, career planning, career development, school achievement, work adjustment, substance abuse, marital harmony, parenting and child development, to name a few (Herr, 1982). In addition, research has investigated specific counseling issues to understand change mechanisms; in smoking cessation research, ten processes have been reported to account for much of the change in counseling: consciousness raising, self-reevaluation, self-liberation, counterconditioning, stimulus control, reinforcement management, helping relationships, dramatic relief, environmental reevaluation, and social liberation (Prochaska, Velicer, DiClemente, & Fava, 1988). Other research shows that specific theoretical orientations (e.g., CBT) with particular psychological disorders can be more effective and efficacious when compared to other theoretical orientations and no treatment, or can add significantly to medical treatment (Bloom, Yeager, & Roberts, 2004). In opposition, as mentioned above, some researchers investigating change processes have posited transtheoretical constructs or common-factor explanation for counseling outcomes, with aspects such as supportive factors, learning factors, therapist factors, client factors, or contextual factors accounting for change regardless of the theoretical orientation used by the counselor (Torrey, 1972; Lambert & Bergin, 1994; Prochaska, DiClemente, & Norcross, 1992). Additionally, research has supported several models of client change (e.g., stages of change model: precontemplation, contemplation, preparation, action, and maintenance [Prochaska et al., 1992]). Because counseling is interested in human health and well-being within the broader context of the client's life and transition, both quantitative and qualitative approaches to research are utilized. In order to strive toward best practices, counselors regardless of discipline or service area are encouraged/required to inform their practice through various forms of applied, process-based, and/or outcome-based research and literature.

Counseling Horizons

Although counseling is a profession that is largely focused on individuals, families, or groups, current movements in the areas of social justice, social advocacy, and social interest are coming to the fore (D'Andrea, 2009; Ivey & Collins, 2003). The counseling profession recognizes the sociocultural basis for health and wellness, therefore social, economic, and systemic considerations can be included in the goals for positive change. Because client's goals must be understood within the context of their lives, the broader elements of these contexts must also be examined as contributing factors to health and well-being. Through research, community service, and counseling practices, the counseling profession includes both client and context as objectives for health, development, and positive change.

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Counseling Education

► Counseling

Counseling Psychology

► Counseling

Count Data Models

► Poisson Models

Country Indicators for Foreign Policy (CIFP)

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Definition

Country Indicators for Foreign Policy (www.carleton.ca/cifp) (CIFP) is an independent research organization based at the Norman Paterson School of International Affairs at Carleton University, in Ottawa, Canada, focusing on ► democracy and governance, aid monitoring, risk analysis, and mainstreaming aid effectiveness. The project has over 15 years experience in developing methodologies, training, and working with local, national, and regional organizations and governments. Its reports and publications provide in-depth analyses of country performance. CIFP's funders and supporters have included the ► United Nations Development Program, Canada's Department of Foreign Affairs and International Trade and Department of Defence, Defence Research and Development Canada, the Canadian International Development Agency, the SWPs Conflict Prevention Network, and the European Commission's Joint Research Centre.

Description

Developing policy-relevant tools and research in the absence of rigorous peer review is not sufficient. At its inception, the CIFP fragile states project established a Scientific Committee comprised of thematic experts and practitioners who provided comment through workshops and reviews of work in progress on the methodology, the analysis, and the case studies.

As a result, we have developed a strong publication record and will continue to do so in the foreseeable future. Our publications have been threefold. First, we have produced articles and books that provide in-depth assessment of existing

research projects on failed and fragile states in order to identify the presumed causes of fragility and failure. These publications examine the extant literature on state failure including assessments of seminal contributions on the subject.

Second, we have publications and research reports that specify the causes of fragility in order to develop our own models. In these articles, we have provided a clear definition of fragility which takes into account the fact that states need to possess three fundamental properties in order to function effectively: authority, legitimacy, and capacity (the so-called ALC framework). This is the definition of fragility which has been used by the CIFP project in assembling structural indicators and in constructing the state fragility index (an overall annual ranking of countries and along different dimensions).

After providing conceptual clarity to the issue of state fragility and assessing the evidence and policy implications of addressing the challenges these states face, we have conducted statistical and in-depth case study analysis to identify the correlates of fragility using latest cross-sectional data from the CIFP project. This represents a substantial contribution to the existing literature in that there had been no serious attempt to identify the main determinants of state fragility. It is our belief that an understanding of why and how states become fragile is necessary if engagement (especially through support for the public and development assistance) is to have a measurable and positive impact in fragile states.

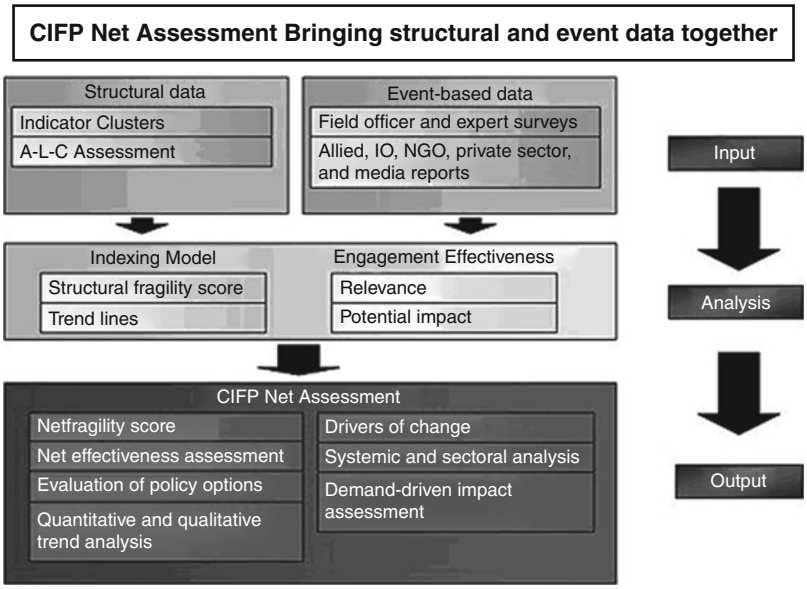
Third, having identified the relevant (and vast) literature on the subject and having developed an alternative framework, we then test, empirically, that framework in order to demonstrate its utility as a policy-relevant analytical tool. Testing proceeds in two stages. First, we reconceptualize the meaning of state fragility using a framework derived from three core measures of state performance: authority, legitimacy, and capacity of a state, collectively referred to as ALC. Measures of these ALC components correspond to six different categories of state performance: economics, governance, security and crime, human development, demographics, and the environment. Initial testing of our fragility index, by exploiting both case study and temporal variations in our analysis, shows that fragility is driven by a number of factors, of which the level of development (capacity) seems to be relatively more important. Second, we complement this analysis by examining state fragility in specific country cases, again using the ALC framework. The following diagram outlines the full extent of the CIFP analytical framework – known as the CIFP Net Assessment (CNA) – identifying the various modules involved in the analysis (Fig. 1).

Second, the project presents a methodology for evaluating individual country performance over time. This drill-down capability provides guidance to programming officers at CIDA and other government departments working in complex and fragile environments. It enables them to focus efforts and resources on the root structural causes of fragility rather than the outward symptoms of the problem, while simultaneously identifying areas of comparative strength within the state that may provide valuable points of entry for international development efforts. At the same time, it allows them to avoid decisions likely to further destabilize the country through otherwise unforeseen consequences of programming activities (Fig. 2).

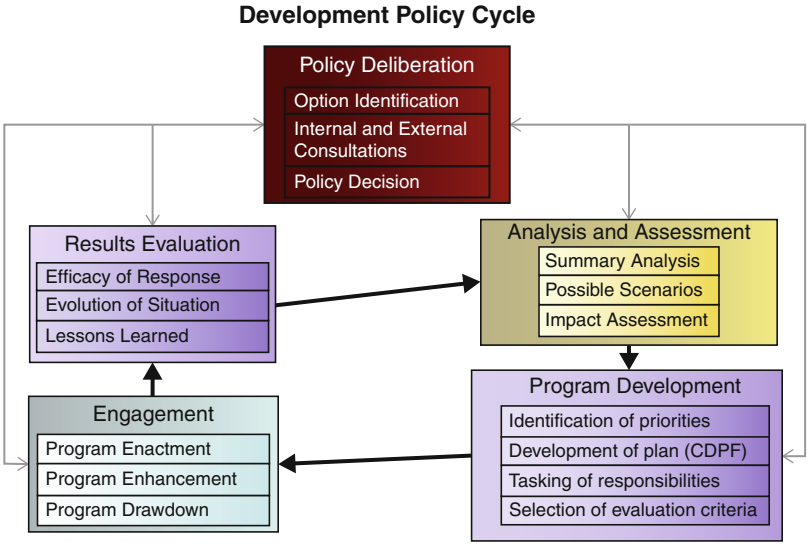
Third, the project engages in statistical and theoretical research, regarding the nature of the relationship between state fragility and selected key variables. The findings provide some insight into the varied causes of state fragility. Several important avenues requiring further study have been extensively covered in publication form. Such research is particularly relevant, given that the now broadly acknowledged lack of progress toward global attainment of the Millennium Development Goals (MDGs) is to a certain extent explained through the poor performance of the world's fragile and failed states.

One of the key innovations has been the construction of a web-based country monitoring tool, shown here (Fig. 3):

The systematic collection and evaluation of dynamic data, also known as events-based information analysis, is highly relevant to fragile states programming and processes.

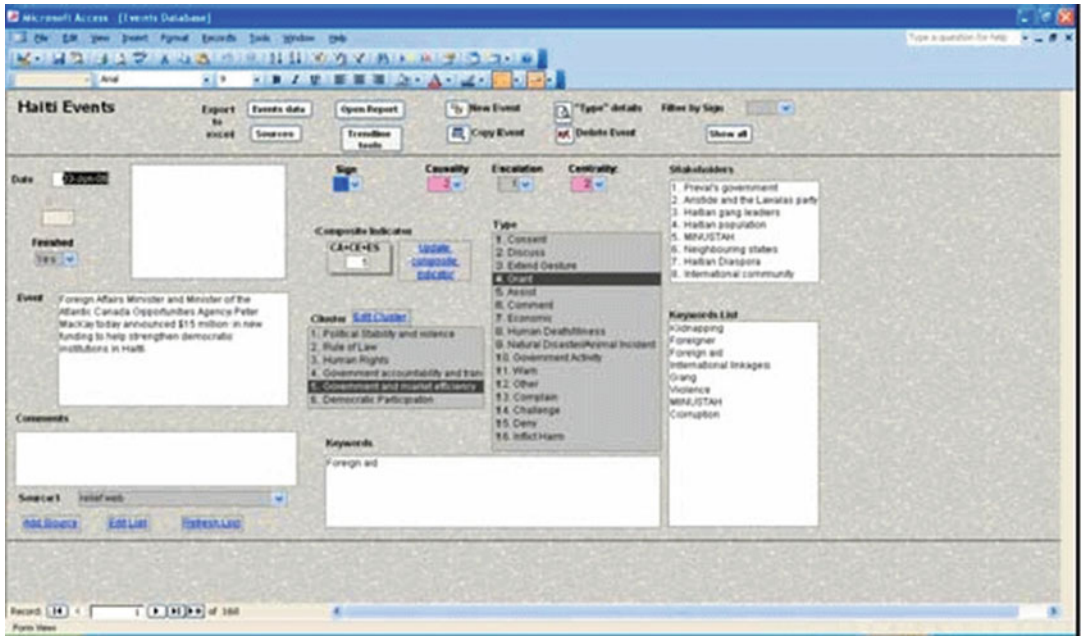


Country Indicators for Foreign Policy (CIFP), Fig. 1 CIFP analytical framework



Country Indicators for Foreign Policy (CIFP), Fig. 2 Development policy cycle

Dynamic data analysis, whether it draws on information from media sources or country experts, is useful for identifying up-to-date trends in popular perceptions, preferences, and stakeholder behaviors. Dynamic data analysis can add considerable value through regularized and standardized reporting. It can deepen understanding of trends found in structural data and can highlight trend reversals. For example, a statistical study may show a steady decline in violent events over a series of years, but current events may evidence a sudden surge in violent demonstrations, one that will show up in structural data only until after the fact. Events-based information can also provide a window into stakeholder perceptions, how they are reacting to real-time changes, and why they are doing so. The figure below shows patterns of decline in governance performance approximately a year prior to the declared state of emergency in



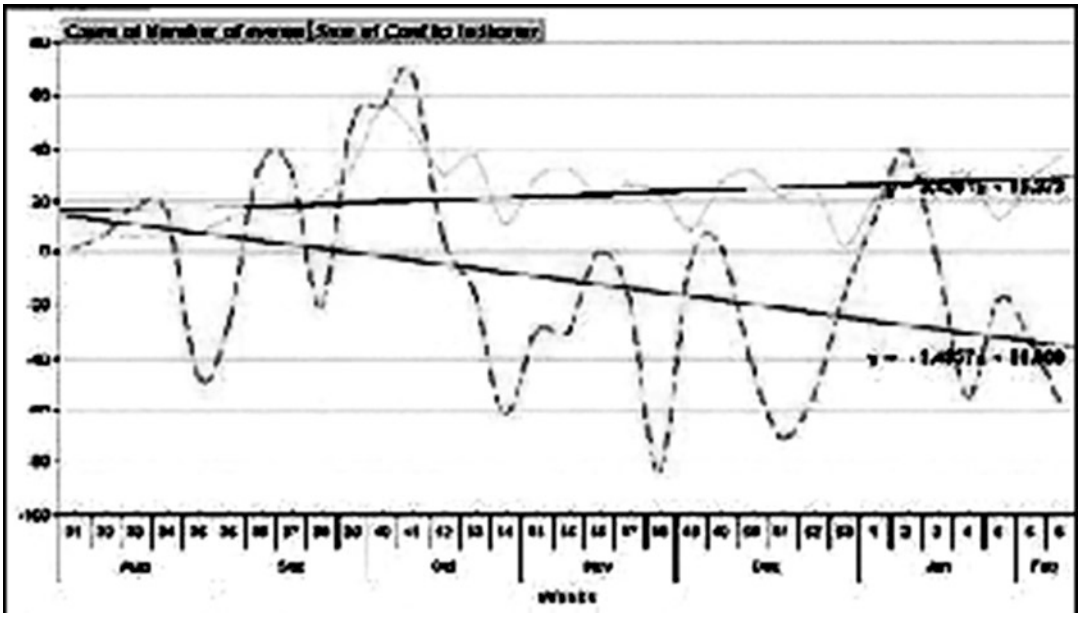
Country Indicators for Foreign Policy (CIFP), Fig. 3 Events coding methodology

Pakistan in 2007. The red regression line in the graph represents the overall trend in events. Clearly, in the case of Pakistan, there was considerable evidence of an approaching crisis. Such evidence, if properly understood, can allow policymakers to respond in a timely fashion to impending problems, rather than simply responding after the fact (Fig. 4).

The project also employs qualitative information, as a valuable complement to the systematic collection of statistical data, as it uncovers details and nuance. Put simply, when correctly structured, expert opinion can provide the "why" behind the "what" revealed through structural and dynamic data analysis. Expert opinions can provide detailed insight into specific issue areas, as well as offer ideas about what areas deserve the most attention going forward, either because they are functioning well and can be used to propagate positive reform in other parts of the governance system or because they are weakening and threaten to undermine stability and development in other sectors. For example, CIFP's expert survey on Ghana highlights the problem of low popular expectations of government as an obstacle to improving governance performance. Ghanaians have become so accustomed to limited government capacity that they have ceased to seriously challenge the government on its service delivery.

Overall, the approach specified in our publications has the distinct advantage of identifying country-specific patterns of fragility while at the same time allowing for broad strategically relevant measures of effectiveness. Through our research on the most extreme cases of fragility, we have been able to analyze issues related to the timing and sequencing of policies and speak about possible trade-offs that policymakers need to confront in addressing the root causes of fragility and failure. Our work on small island developing states has also been extremely helpful in understanding a particular subset of states that have succeeded in building resilience and overcoming inherent vulnerabilities.

Taken together, our existing evidence-based and policy-relevant research and expertise can provide guidance to bank staff to design and implement governance and public sector programs in fragile and conflict-affected states. Our framework, which builds on the core pillars of stateness, namely, authority, legitimacy, and capacity, is directly applicable to the issue of "effective public authority" or state-building.



Country Indicators for Foreign Policy (CIFP), Fig. 4 Sample events for Pakistan 2007

Cross-References

- ▶ Democracy
- ▶ United Nations Development Programme

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County Government

► Local Government

Couple Communication

► Marital Communication

Couples Dating

► Dating Relationships

Couples Violence

► Partner Violence

Court Statistics

► Conviction Statistics as Measures of Crime

Crafts

► Arts and Quality of Life

Craniocerebral Trauma

► Traumatic Brain Injury

Creative (or Cultural) Vibrancy

► Cultural Indicators

Creative Class (Richard Florida)

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Synonyms

Creative workers; Talent

Definition

The creative class is defined as the collection of occupations that specialize in the novel combination of ► knowledge and ideas to solve problems or create value. The creative class construct is used to explain differences in urban and regional economic performance where this capacity is thought to be central to growth in developed market economies in an era of globalization.

The creative class construct puts much greater importance on ▶ quality of life characteristics to explain differences in the concentration of highly skilled occupations across space compared with conventional ▶ human capital theories of ▶ economic growth.

Description

The creative class was first defined in Richard Florida's 2002 book *The Rise of the Creative Class*. The book rose out of a research program to understand why Pittsburgh was having difficulty retaining highly educated workers being produced by its universities. The research corroborated findings from other research on "creative cities" or "consumer cities" that urban amenities and quality of place were becoming important factors in attracting and retaining highly skilled workers (Clark, Lloyd, Wong, & Jain, 2002; Glaeser, Kolko, & Saiz, 2001; Landry, 2000). The work generated much more interest in the popular press, however, because the definition based on occupational employment statistics allowed a ranking of cities.

The creative class is defined concretely by nine summary occupations in the Standard Occupational Classification (Florida, 2002). The Super Creative Core is comprised of all computer and mathematical occupations; architecture and engineering occupations; life, physical, and social science occupations; education, training, and library occupations; and arts, design, entertainment, sports, and media occupations. Creative Professionals are comprised of all management occupations, business and financial occupations, legal occupations, healthcare practitioners and technical occupations, and a subset of sales occupations defined as "high-end sales and sales management." The definition has been criticized for its weak ▶ construct validity (Markusen, 2006; McGranahan & Wojan, 2007; Storper & Scott, 2009). Since the classification uses summary occupations, it includes several detailed occupations with limited functional requirements for creativity. Describing this collection of occupations as a class has been criticized for imposing false common interests across a highly heterogeneous set of creative workers that draw on different symbolic, analytic, or synthetic knowledge bases (Asheim & Hansen, 2009; Markusen, 2006).

The key insight from the creative class literature is that workers in occupations specializing in creative tasks demonstrate strong preferences for various urban amenities, and these preferences affect the location of talent (Clark et al. 2002; Florida, 2002; Wojan, Lambert, & McGranahan, 2007). A rural variant of the creative class construct posits that some creative workers may choose to forego higher urban earnings in exchange for the quality of life found in places endowed with natural amenities (McGranahan & Wojan, 2007; McGranahan, Wojan, & Lambert, 2011). Public initiatives to increase experiential leisure outside of the workplace in the form of participatory sports and recreation, outdoor festivals, performance and gallery spaces, and urban planning that facilitates walkability and personal interaction are the central policy prescriptions. The holistic challenge for urban areas is fostering a "creative milieu" that promotes the cross-fertilization of ideas, knowledge, and resources across constituents of the creative class (Florida, 2002; Jacobs, 1961; Wojan et al. 2007).

The critical hypothesis left untested by urban creative class proponents was whether "jobs follow talent," as suggested, or whether "talent follows jobs," as assumed in traditional urban development approaches. Creative class opponents have used single equation linear regression models to demonstrate that growth models comprised of economic variables have much greater explanatory power than models comprised of quality of life variables (Donegan, Drucker, Goldstein, Lowe, & Malizia, 2008; Hoyman & Faricy, 2009; Scott, 2010). However, a structural equation model controlling for both economic and quality of life factors confirmed that growth in the creative class leads to and does not follow from employment growth (McGranahan & Wojan, 2007). The debate as to whether the concentration of the creative class is due more to demand (employment opportunities for creative workers) or supply (quality of life attributes attracting creative workers) factors may be insoluble if either may

dominate in different places at different times (McGranahan, Wojan, & Lambert, 2011).

Cross-References

► Construct Validity
► Human Capital

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Creative Movement

► Dance and the Quality of Life

Creative Power

► Vitality, Community, and Human Dignity in Africa

Creative Vitality

► Cultural Indicators

Creative Workers

► Creative Class (Richard Florida)

Creativity and Quality of Life

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Definition

There is little agreement on what constitutes creativity. In general terms, it relates to the capacity of producing something new and adequate (an idea, a process, an object, etc.). What constitute "new" and "adequate" varies between disciplines, traditions, and theories. In the last years, confluence approaches are gaining importance. These maintain that in order for creativity to appear specific, aspects related to the environment and the person as well as the domain where creativity occurs have to coincide (confluence) in a specific time, person (or group), and place.

Description

The ▶ adaptability of human beings depends greatly upon their creativity, especially in terms of the transformation of the world in order to make it more fitted to human needs (Cohen & Ambrose, 1999). Human artifacts and inventions are usually seen as products of human creative ▶ capabilities. In a similar way, creativity can be made responsible for immense crimes and atrocities in human history (the dark side of creativity) (Cropley, Cropley, Kaufman, & Runco, 2010). These achievements (good or bad) are usually related to the so-called big "C" creativity, also referred as eminent or historical creativity (see, e.g., Csikszentmihalyi, 1996; Simonton, 1999). This relates to human achievements that have contributed significantly to the change of a specific field of study or to human evolution, as for example, the discovery of fire or the development of the theory of relativity. Creativity is, thus, an important aspect contributing the creation of ▶ well-being and maintaining ▶ quality of life, through the creation of innovations and technology.

Creativity also refers to the capacity of individuals to adapt the environment in their everyday lives, what is usually called "everyday creativity" (Richards, 1999). The National Advisory Committee on Creative and Cultural Education [NACCCE] (1999) has referred to it as a "democratic understanding" of creativity, in the sense that everyone can be creative.

Creativity Research: A Long Heterogeneous History

Craft (2001) maintains that the first systematic study of creativity was undertaken by Galton (1869) in his book "Hereditary Genius." She maintains that in the early 1900, there were four main traditions in the research of creativity: psychodynamic (Freud, 1908/1959), cognitive (Mednick, 1962), behaviorist (Skinner, 1956, 1970), and humanistic (Maslow, 1968). For some, modern research on creativity starts with the work of Guilford on "divergent thinking" and his address to the American Psychological Association (Guilford, 1950). This speech was followed by a large amount of research, mainly focused on the development of psychometric approach to creativity. Torrance built on Guilford ideas to create his Torrance Test for Creative Thinking (TTCT) (Torrance, 1966, 1974, 1984, 1990, 1998). This test of divergent thinking skills, the capacity to produce many ideas when presented with one problem, has been translated into 30 different languages and has been widely used in large-scale studies on creativity (Kim, 2006). During some years in the 1960s and 1970s, creativity was made equivalent to divergent thinking (Runco, 2007). However, its strength fades away, and criticism arose in terms of its internal and external validity (Runco & Acar, 2012).

Traditionally, creativity research is divided into four areas that denote the emphasis of the different traditions. These are the four Ps on creativity research: person, process, product, and press (or place) (Rhodes, 1962). Simonton (1995) added Persuasion. Studies focusing on the person search for characteristics of creative people (Plucker & Renzulli, 1999); they include studies on eminent creators (Gruber, 1974/1981; Csikszentmihalyi, 1996; Simonton, 1999), as well as personality traits that might be associated with creativity (Helson, 1996), and studies on mental illness and creativity (Chavez-Eakle, Lara, & Cruz, 2006). Studies focusing on the process are mainly interested in the different phases in the creative process, how it can be enhanced, and in how it is constituted as well as an interest in problem solving (Wallas, 1926; Wallach & Kogan, 1965). Cropley and Cropley (2008, 2012) proposed a stage model of creativity in which different phases of the creative process require different cognitive and personality resources. Finally, research focusing in products looks into outcomes of the creative process mainly. It judges artifacts in terms of its creative value. Finally, persuasion refers to the capacity of creative people to "sell" their ideas adequately (Sternberg & Lubart, 1999). Runco (2009) has divided this into creative potential and performance. While studies focusing on creative performance are interested in the products and aspects of persuasion, creative potential is embedded in the study of the person, the process, and the place.

From the 1990s and, later on, from the year 2000, creativity research is converging slightly, at least in certain agreement of the basic definition and the complexity of the concept. This complexity has been translated into confluence approaches to creativity that present a complex system of interactions between aspects related to the five Ps described above that occur at the same time and that result in creativity (Sternberg & Lubart, 1991; Amabile, 1983; Gruber & Davis, 1988; Csikszentmihalyi, 1996).

The system model of creativity proposed by Csikzentmihalyi (1996) is one influential theory and relates to the quality of life. For him, creativity is an "ad-hoc social attribution to new ideas and objects that find favour in the marketplace of ideas or commodities" (Csíkszentmihályi, 2009, p. 408). His system theory sustains that creativity emerged in the interaction between the domain (culture), the field (gatekeepers of the domain), and the person. In addition, Csikzentmihalyi (1990) has introduced the ▶ flow as an experience that one experiment went engaged in the creative process (Csíkszentmihályi & Nakamura, 2002). One of the crucial aspects of such experience and hence for creativity to arise is the ▶ intrinsic motivation (Amabile, 1996).

In addition to these psychological traditions on the research on creativity, Richard Florida (2002) has introduced the idea of the creative class to denote the share of the population that specializes in the novel combination of ideas to create value. His work has been influential in urban policy and creating better conditions to attract talented individuals, providing them opportunities for better ▶ quality of life.

Cross-References

- ▶ Adaptability
- ▶ Capabilities
- ▶ Creative Class (Richard Florida)
- ▶ Crime
- ▶ Everyday Life Experience
- ▶ Flow
- ▶ Innovation Design
- ▶ Intrinsic Motivation
- ▶ Problem-Solving
- ▶ Quality of Life
- ▶ Well-Being

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Crime

► Deviance

Crime and Quality of Life in Saskatoon, Saskatchewan, Canada

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Synonyms

Perceptions of safety

Definition

► Quality of life (QOL) is influenced by aspects such as health, family, friends, community conditions, and opportunities for employment, income, housing, as well as access to adequate public services. Perceptions of safety can also have a strong influence on quality of life.

Description

Background

The March 12, 2008 edition of Maclean's, a Canadian national news magazine, featured a full-length report titled, "The Most Dangerous Cities in Canada." It presented 2006 data for 100 cities according to several types of crime including murder, aggravated assault, sexual assault, break and enter, and auto theft. The report also included commentary on the causes of high crime in certain cities, social upgrading initiatives, and crime prevention strategies. According to Maclean's (2008), the majority of high-crime cities are found in western Canada. When presenting its ranking of cities, the report used the heading "The Worst and Best of Canada." At the top of this list, ordered according to highest overall crime rate, were the two largest cities in the western Canadian province of Saskatchewan – Regina and Saskatoon, ranked number 1 and 2, respectively. For many years, these two cities have consistently recorded crime rates among the highest in the country, and this distinction has resulted in a mixture of reactions from local residents, politicians, and media commentators ranging from disbelief and anger to fear and suspicion of the data.

Media coverage of crime regularly focuses on quick sensational stories and the presentation of bald statistics often labeling certain communities as "dangerous" or "troubled" without probing further into societal issues and local conditions which may contribute to crime. At the same time, within the fields of urban geography and urban studies, relatively few studies have directly examined the link between crime and ▶ quality of life (QoL). There is a need to assess more fully the perceptions and attitudes of local residents toward issues of personal safety, particularly those living in high-crime neighborhoods.

Saskatoon, Saskatchewan

Saskatoon is a midsized Canadian city with a population of 222,000 and serves as a regional service center for a provincial economy (Saskatchewan) dependent on natural resources, particularly oil and gas; mining; and agriculture. As a result, the city is currently in the midst of an unprecedented economic boom, and overall, the city's residents enjoy a strong QoL. However, a socioeconomic divide is visible with several core neighborhoods on the west side of the South Saskatchewan River experiencing high levels of ▶ deprivation, unemployment, and substandard housing (Kitchen & Williams, 2009; Randall, 2003; Thraves, 2007). Saskatoon has one of the most pronounced and growing income gaps among all Canadian cities contributing to significant neighborhood inequality (Federation of Canadian Municipalities [FCM], 2003; 2005).

According to data from the Canadian Centre for Justice Statistics (CCJS), in 2007, Saskatoon had the second highest overall crime rate (nearly three times as high as Toronto, the country's largest city) and the highest violent crime rate. Crime is highly concentrated in Saskatoon's inner city. Two communities Riversdale and Pleasant Hill have among the highest rates of neighborhood crime in Canada. Research indicates that in Saskatoon, there is a strong association between crime, particularly violent offences, and vulnerable segments of the population, most notably low-income families. In addition, high-crime areas are associated with neighborhoods containing poorer quality and older housing (Kitchen, 2006).

This entry reports on the findings of a study by Kitchen and Williams (2010) that examined perceptions of safety and quality of life in Saskatoon. Very few studies in the social sciences (e.g., criminology, sociology, urban geography) have combined quantitative and qualitative time-series data at the neighborhood level to investigate the relationship between crime and QoL. In the study, data were employed from three main sources covering the period 2001–2004–2007: recorded crime statistics from the Saskatoon Police Service (SPS), a telephone survey with about 1,000 residents, and in-depth interviews with approximately 90 of the survey respondents in each year. These data were collected in three neighborhood clusters representing high, middle, and low socioeconomic status (SES).

Crime and Quality of Life Research

Relatively few studies have made a full and direct link between crime and QoL. In fact, Michalos and Zumbo (2000) searched 6,000 abstracts and found only a handful of publications connecting crime with measures of ▶ happiness, ▶ life satisfaction, or satisfaction with the overall QoL. Several years later, Moller (2005) conducted a further search of 600 publications between 1997 and 2004 and discovered just four articles linking criminal victimization to subjective well-being.

An important element of the crime-QoL discourse is the "▶ fear of crime." Since the 1970s, the fear of crime has become a key political theme and has generated a large body of research (Jackson, 2004). Jackson (2006) argues that anxiety related to the fear of crime is now so widespread in Europe and the United States that it has a negative influence on individuals and society and can lead to a lower QoL. Heightened concern for crime may affect communities by diminishing the sense of ▶ trust and cohesion among residents. Furthermore, Jackson (2006) contends that public perceptions of crime have the potential to influence specific government policies such as border control, immigration, and policing resources and strategies.

An important aspect of crime research is the effect of mass media consumption on people's perceptions and fears about crime. Research has consistently shown that media exposure is significant in influencing people's view of safety and crime (Farrall et al., 2007; Jackson, 2006; Liska, 1990). Furthermore, Vanderveen (2006) discusses fear of crime as a political symbol and as an important aspect of public opinion, which is in constant interaction with politics and policy. The author stresses the interplay between public opinion, public policy, and the news media in influencing perceptions of crime. The news media can select and define issues and social problems and contribute to setting the political agenda.

> The public servants, politicians and policymakers are forced to respond to the issues being covered by the mass media. On the other hand, these same politicians and policymakers use the news media as surrogates for public opinion, especially in the absence of polls and based on the idea that the mass media have some insight into the public mind. (Vanderveen, 2006, p.205)

Perceptions of Crime and Quality of Life in Saskatoon

Kitchen and Williams (2010) found that crime, especially violence, is concentrated in several low-SES neighborhoods in the city's core. Social conditions have an effect on perceptions of crime with a large and growing gap evident in the concern for personal safety between high/middle SES and low-SES neighborhoods. However, unlike many other places, it is reasonable to conclude that perceptions of crime in Saskatoon are not "out of kilter" with crime itself. In fact, most people are surprised to learn that the city has the highest rate in Canada, and it appears that even though low-SES residents are aware of crime in their neighborhoods, they understate their concern for safety relative to the actual crime rate.

Fear of crime appears to be most prevalent in a specific and relatively small segment of Saskatoon's population and among residents who have a lower QoL and have lived in disadvantaged and declining neighborhoods for a short period (less than 5 years). Fear of crime is higher for residents with lower self-rated health, which is closely related to QoL. Furthermore, it is evident that during the 2000s, fear of crime became increasingly concentrated geographically in Saskatoon's core.

In the research by Kitchen and Williams (2010), the interviews with residents were unique in that they revealed socioeconomic and geographic differences in perceptions of neighborhood crime that exist within a city. That is, how residents of high-crime areas feel their community is perceived by others and conversely how residents of low-crime areas view high-crime areas. This issue has not been fully developed in the research and deserves more attention. It is apparent that, to a certain extent, a psychological and geographic divide exists in Saskatoon based on SES and perceptions of crime. Low-SES residents are unhappy about this situation as they feel that their neighborhoods are being unfairly stereotyped. Many see crime as a citywide problem. These perceptual divisions are only reinforcing negative images and contributing to a cycle of crime, fear, and mistrust. However, more encouragingly, the research found that

among some high-SES residents, there is an awareness of the problems in the core and the need to take action.

Cross-References

- ▶ Good Neighborhood Index
- ▶ Index of Neighborhood Problems
- ▶ Neighborhood Characteristics and Children's Safety
- ▶ Neighborhoods and Life Satisfaction in Germany
- ▶ Urban Life, Quality of

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Crime Control in China, Satisfaction with

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Synonyms

Symbolic theory of crime and crime control

Definition

Crime control refers to authorized activities intended to control crime by constraining people's behavior (Liska, 1987, p. 67). The major crime control actions are various punishment activities, including detaining, arresting, prosecuting, and executing offenders. Satisfaction with crime control indicates how one is satisfied with the government's crime control performance. It is an important dimension of public opinion toward criminal justice, which is vital to the functioning of the criminal justice system.

Description

Along with modernization, crime rates have risen significantly in China's cities over recent decades (Liu & Messner, 2001). Crime has become a usual social phenomenon in contemporary urban China. The increasing crime rate has posed a threat to public safety and has become one of the most serious public and government

concerns. In response to the problem of increasing crime, the Chinese government launched three rounds of "Strike Hard" anticrime campaigns. They have also adopted an approach of comprehensive treatment to social order, which is designed to mobilize and coordinate the efforts of the whole society to fight against crime by using political, legal, economic, administrative, and educational measures (Liang, 2008; Situ & Liu, 1996).

In recent years, there has been a limited but increasing volume of literature that addresses people's perceptions of public safety and social order in China (Yao et al., 2009). A pioneer study by Zhuo, (2012) examines public satisfaction with crime control in urban China. By applying the symbolic perspective to the context of Chinese urban society, this study explores how three dimensions of social capital – social trust, social bonds, and social cohesion – are associated with satisfaction with crime control among Chinese urban residents.

The symbolic theory well addresses why and how the multiple dimensions of social capital are associated with crime, punishment, and the related public attitudes. The theoretical foundation of the symbolic perspective can be traced back to Durkheim's views about crime and punishment. Durkheim argued that the primary function of punishment is to reinforce normative consensus, restore social solidarity, and maintain and reaffirm social cohesion (Durkheim, 1933, 1938). Consistent with the Durkheimian view about the symbolic aspect of punishment, the symbolic perspective suggests that social trust, social cohesion, and social bonds or relations have strong influences upon opinions concerning crime and crime control. A number of empirical studies in Western societies have provided empirical evidence for the symbolic perspective (e.g., Tyler & Boeckmann, 1997). Zhuo (2012) applies the symbolic theory in the setting of urban China to explore public satisfaction with crime control.

Data used in Zhuo's study (2012) are obtained from Chinese General Social Survey 2005 (CGSS), which is linked with provincial-level data from the Chinese Procuratorial Yearbook 2005, the China Statistical Yearbook 2005, and the 2,000 Chinese Population Census. A series of two-level hierarchical ordinal logistic random-intercept regression models are estimated to assess the effects of three dimensions of social capital on public satisfaction with crime control. Social trust is captured by bonding trust and bridging trust. Bonding trust is measured by trust among known people in immediate surroundings, while bridging trust refers to trust in strangers. Social bonds are measured by the intimacy with relatives and friends. Neighborhood cohesion is used as an indicator of social cohesion. It combines two items: neighborhood closeness, which is measured by how the neighbors are familiar with each other, and neighborhood help, which is measured by how often the neighbors help each other. The controlled variables include individual-level demographics and socioeconomic status, contextual-level arrest rates, economic development, as well as population mobility.

The most important findings of this study are that bridging trust is a significant predictor for satisfaction with crime control, while bonding trust is not. The Chinese society has a high level of social trust, but the radius of trust tends to be small. Chinese citizens tend to trust people within the network of family, relative, friends, neighbors, etc., and distrust out-of-network people (Fukuyama, 1995). In other words, the bonding trust in China is high, while the bridging trust is low. In modern societies, we need trust when we leave the sphere based on familiarity and enter a world dominated by contingency, complexity, and risk (Luhmann, 1988). Trust is needed when role expectations and familiar relationships no longer help us to anticipate the reactions of our interaction partners. During the process of modernization, bridging trust may become more important in China, as the increasing social mobility and socioeconomic activities lead to more social interactions with out-of-network people than before. Although the average level of bridging trust is low in China, it has a relatively large variation and significantly influences public attitudes toward crime control. In contrast, bonding trust is universally high in China and hence does not help to explain the variations of public attitudes. Therefore, we may expect that

bridging trust is becoming an important form of social capital in contemporary China.

Neighborhood cohesion is found to be significantly associated with satisfaction with crime control in urban China. Great intimacy and frequent helping among neighbors are correlated to higher levels of satisfaction with crime control. The results support the finding by Zhang, Messner, Liu, and Zhuo (2009) that respondents who perceive a high degree of social cohesion in the neighborhood are less likely to be fearful of crime. Meanwhile, though Zhang et al. find that guanxi is a strong predictor for fear of crime, Zhuo's study does not find any evidence for a relationship between social bonds and satisfaction with crime control. The study by Zhang et al. measures guanxi by the relational network in the immediate neighborhood, but Zhuo's study adopts a broad measure of social bonds, which includes any relatives and friends. The social bonds within the neighborhood and those beyond the neighborhood may influence people's perceptions of crime and crime control in different ways. A look at the findings of Zhang et al.'s study and Zhuo's study may reveal the important role of neighborhood social capital in the public attitudes toward crime and crime control. The traditional neighborhoods organized around work units in pre-reform urban China were stable and homogenous. They exhibited strong social ties and thick interpersonal trust and were the main agents of social control and crime control. Along with economic reform including housing reform, urban households in China began to be sifted and sorted socially, economically, and spatially. The traditional urban neighborhoods have been experiencing dramatic restructuring and transformation. Consistent with the symbolic theory, public attitudes toward crime and crime control during the transitional era would be largely shaped by neighborhood traits.

With regard to demographics, education is found to be negatively correlated to satisfaction with crime control, while self-evaluated SES has a significant positive impact on satisfaction with crime control. We may speculate that the highly educated persons might be more concerned with social problems, more likely to perceive the defects of the government's performance, and hence are less satisfied with crime control. People with high SES might live in good neighborhoods, where adequate guards and safety facilities are present and criminal events rarely happen. More research is needed to explain these associations.

In terms of contextual characteristics, the results indicate no effect of arrest rates on public satisfaction with crime control. On the one hand, given the mixed findings about the instrumental perspective among the empirical studies on Western societies (Jacobs & Carmichael, 2002), this finding is not surprising. On the other hand, the present finding indirectly lends support to the symbolic perspective. Public perceptions of crime and crime control are less to do with instrumental concerns about the risk of crime and more to do with symbolic concerns about social cohesion and moral consensus (Tyler & Boeckmann, 1997).

A unique feature in contemporary China is the unprecedented migration from rural area to cities. Contrary to that commonly observed in the West, this study finds that persons who live in migrant-concentrated provinces report higher levels of satisfaction with crime control in urban China. One possible explanation is that the migrant-concentrated provinces tend to implement strong social control approaches, and hence, the government's crime control efforts are more perceivable to the public in these regions. This divergent finding suggests the need for a degree of flexibility in the application of the Western theoretical perspectives in other social contexts.

Overall, Zhuo's study underscores the importance of social capital for explaining individual attitudes toward crime control. It contributes to the discipline in two important respects. First, it applies the established Western theoretical perspective in the setting of urban China, thereby addressing issues of generalizability and also extending our understandings for the impact of diverse forms of social capital on crime control attitudes to a non-Western context. Second, utilizing large representative sample data to examine crime control attitudes in China is an improvement over previous research that mostly relies on small nonrandom samples.

This study represents an addition to a small number of studies that explore crime control

attitudes among the Chinese citizens and offers some empirical support to the symbolic perspective in a non-Western social context. Researcher should continue to explore the possible individual-level and contextual-level correlates for crime control attitudes in China. Future research should also further assess the Western sociological and criminological theories about crime control attitudes in the Chinese context. A more challenging task is to develop new explanatory variables and theories that reflect the unique features in the Chinese society (Zhuo et al., 2008).

Cross-References

- Demographics
- Development
- Education
- Migration, an Overview
- Public Opinion
- Social Cohesion
- Social Interaction
- Social Mobility
- Socioeconomic Status (SES)
- Trust

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Crime Estimates

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Synonyms

Crime rates; Crime statistics!

Definition

Measures of the nature and volume of crimes known to justice authorities.

Description

Few people would dispute that the quality of life in any human community is strongly affected by the

prevalence and severity of crime. But, estimating exactly how much crime there is in a specific population is a more difficult question including as it always does extralegal considerations.

In countries that follow the rule of law, a crime has not been committed unless an offender has been found guilty of violating the law through some specified form of due process. From a measurement standpoint, ▶ content validity is jeopardized through false positives (when people have been found guilty of crimes they did not commit) and false negatives (when people have committed crimes, but have never been found guilty of their delinquency in a criminal trial).

If the number of false positives and negatives is roughly equivalent and cancels each other out, we have random error which affects confidence in the estimate. However, when the number of false negatives surpasses false positives, we have a biased measure. In most countries, this is probably the case with respect to estimates of a strictly legal definition of crime, such as the number of convictions, and as a consequence greatly underestimates the number of offenses that are actually being committed in a community.

Charges and crimes known to law enforcement agencies are probably much less biased measures than convictions in this respect. Crimes known to the police are often a matter of public record in the aggregate such as in the Uniform Crime Reports in Canada and the United States. However, since not everyone reports criminal ▶ victimization to the authorities, it is likely that the false negatives still outnumber the false positives.

In an effort to redress this bias, social scientists have developed victimization surveys in which respondents are asked how often they have been victimized in various ways within a given place and period of time. It was through these studies that dramatic disparities were found between the estimates provided by the "official" reactive measures and the proactive estimates provided by the victimization surveys. Unfortunately, there has been a tendency to accept without question the findings of the victimization surveys as valid measures of "hidden crime."

They are not, a priori, valid indicators of "hidden crime." Victimization surveys suffer from false positives and negatives too. Some respondents may not even admit to their victimization on a survey (false negatives), while others may report and even believe they have been victimized when they have not (false positives). Still others may report an assault on a survey that the police or a court would dismiss as uncorroborated or "victim precipitated." Very likely, some offenses are underreported even on victimization surveys (e.g., domestic assault of men by their wives, wives by husbands, and in reductio ad absurdum, homicide, in which the victim is obviously not in a position to respond to questions). But many more are probably reported as crimes when they were not (e.g., fraud when caveat emptor actually applied), and the host of illegal and nonlegal transactions which by law are invalid contracts and therefore not enforceable (e.g., drug deals gone wrong).

Victimization surveys reveal far more about alleged victims than offenders and provide important and interesting information. But as with all measures, especially of misbehavior, crime indicators must be viewed with a certain amount of skepticism (For detailed discussions see Krohn et al., 2010; Lauritsen, 2010; Loftin & Mcdowall, 2010; Mosher et al., 2010). This has not happened in many Western countries. On the basis of media attention to dramatic offenses, and the awareness of politicians of a perceived increase in unseen crime, some governments have declared the intention to increase the length of sentences and construct more prisons to house medium-security offenders. Apart from the logical difficulty of locating and incarcerating invisible offenders, we are left to wonder why victimization surveys are taken as the criterion by which all other indicators are to be judged (see O'malley, 2010). Such blind acceptance not only defies reason but may generate as well as reflect ▶ fear of crime anxieties in citizens about their risk of personal criminal victimization. Even if unfounded, such fears undermine the overall quality of

life, especially in subpopulations who already feel vulnerable, such as women, children, the elderly and infirm.

Cross-References

- ▶ Content Validity
- ▶ Fear of Crime
- ▶ Victimization

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Crime Pattern Theory

- ▶ Impact of Housing Design on Crime

Crime Prevention Through Environmental Design (CPTED)

- ▶ Impact of Housing Design on Crime

Crime Rates

- ▶ Crime Estimates

Crime Rates in Spain

- ▶ Crime Trends in Spain

Crime Risk Perception

- ▶ Perceived Risk of Crime

Crime Statistics

- ▶ Crime Estimates

Crime Trends in Spain

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Synonyms

Crime rates in Spain; Public perception of crime trends; Social changes in crime

Definition

Although the rise in crime reported to the police in Spain has been higher for common offenses – misdemeanors – the mainstream media concentrates overwhelmingly in serious violent crimes, felonies. Victimization surveys measure crime trends as directly experienced by the citizens. Based on this methodology, the results show that contrary to information gathered from police data, and despite social fabric changes, crime in Spain is decreasing. The distorted public perception of this trend is revealed, which seems to respond to a repetitive coverage of serious crime by the mainstream

media. Distorted public perceptions can have a strong influence on perception of safety and also on quality of life.

Description

Introduction

Spain's social structure has changed dramatically in the past two decades: Strong ▶ economic growth at the beginning of the 1980s and the subsequent incorporation of women into the labor market have had important social implications, especially in the family environment. The nature of ▶ economic growth in Spain in the years prior to the crisis favored the enlargement of female employment: The services sector experienced the highest increase and produced the highest employment sector for women (Hidalgo Vega, Pérez Camarero, & Calderón Milán, 2010).

The factors that gave rise to this very important change were women's access to education and job continuity after childbirth. Nowadays young women stay in the education system longer than men; in fact, 60 % of students who complete their university studies are women. Furthermore, in the last 30 years the employment rate for Spanish women between the ages of 25 and 54 years has risen 36 % points, which confirms that motherhood no longer implies leaving paid employment (Fundación INCYDE, 2007).

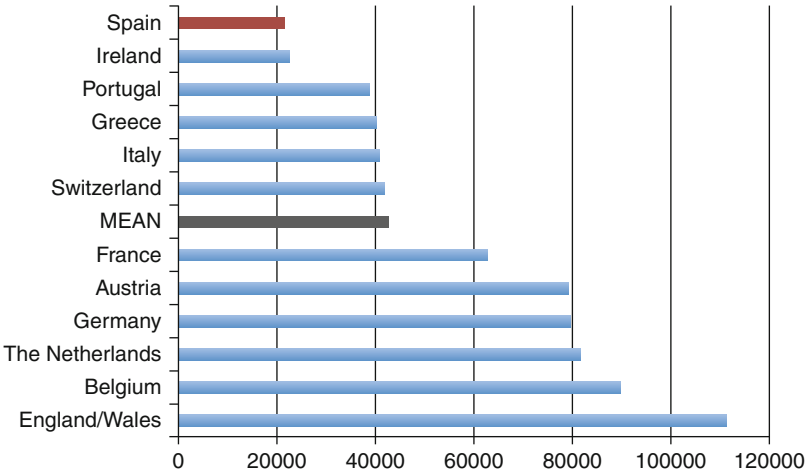
Perhaps the most prominent changes are delayed childbearing and having fewer children, which has considerably reduced the average size of Spanish households (Bericat, 2006; Casares, 2008). On the other hand, although in the early 1990s the population growth rate in Spain was approaching 0 and thus predicting a population decrease, the arrival of immigrants in the mid-1990s reversed that trend.

The ▶ population pyramid indicates that the immigration phenomenon has been concentrated especially in the younger population, which has produced a deceleration in the process of population aging. Furthermore, the natural increase has been driven by the increase in births to foreign mothers. The population living in Spain is not distributed evenly across the territory. The highest population density is in the Community of Madrid, with 724 inhabitants per square kilometer. The average age of the population living in Spain is 40.42 years: 40.99 for Spanish nationals and 32.82 for foreign immigrants. According to the 2009 census, the number of foreign immigrants living in Spain reached 5,648,671, that is, 12.5 % of the population (INE, 2009). This means that foreign immigrants have increased fivefold in just under a decade given that in 2000 the town hall censuses reported only 923,000 foreigners. According to official figures, among those registered (5,648,671), 83.5 % are legal residents and the rest remain illegally in the country. More than half of all foreign immigrants come from either Central and South America (35 %) or the UE-25 (21 %). The foreign nationals with the greatest presence are Moroccan followed by Romanian and Ecuadorian.

Before Spain falls in actual economic crisis, relevant social data also reveal that in recent years the reduction in the ▶ inequality of wealth distribution has reduced (Fundación, 2008); the family structure has changed with a considerable rise of single-parent households; there has been a decline in religious behavior; and the consumption of heroin, cocaine, and cannabis has stabilized, after many years of heroin consumption decline and cocaine/cannabis consumption increase.

Crimes Known to the Pólice

The levels of officially known ▶ crime in Spain are situated among the lowest in Europe, clearly below the average (Fig. 1). Nevertheless, according to official data from the Ministry of the Interior (MIR), recorded ▶ crime in Spain has increased over the last two decades. Between 1989 and 2008, the total number of crimes recorded by the different police forces went from 1,030,996 (MIR Annual Report, 2004) to 1,858,196 (MIR Annual Report Preview, 2009). Crime density between these years, to which we will temporarily limit our work – 1989–2008 – rose from 26.07/1,000 inhabitants to 47.6/1,000 inhabitants (MIR Annual Report Preview). Therefore, both the absolute and the relative



Crime Trends in Spain, Fig. 1 Crime rate per 100,000 inhabitants in Europe, 2003. (Source: *European sourcebook of crime and criminal justice statistics, 2006*)

figures indicate that the trend for criminal offenses recorded in Spain is steadily rising, although it has experienced a marked slowdown in the past decade.

Further analysis of this data reveals the changes produced in the structure of ▶ crime in Spain over the last several decades: According to data from the MIR, minor offenses (misdemeanors) have maintained constant growth since the 1980s. In contrast, levels of serious offenses (felonies) have remained nearly the same in the last 15 years. In fact, for the first time in Spanish recent history, at the beginning of the twenty-first century, the number of minor offenses is higher than the number of serious offenses, both in absolute and relative terms.

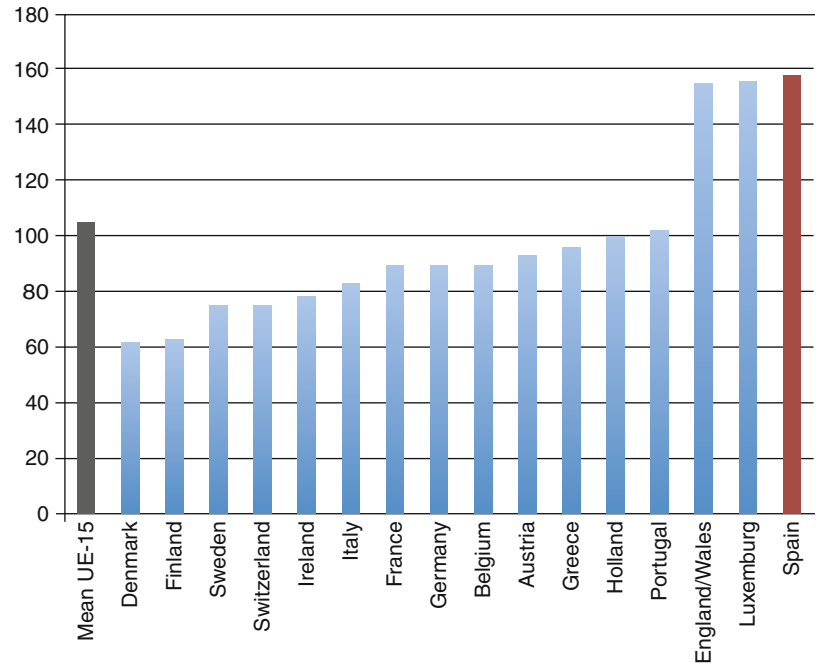
Prison Population Growth

Also, the last decades point to an important increase in the number of prisoners incarcerated in Spain (Cid Moliné, 2008). In 1996 the prison population consisted of 44,312 inmates, corresponding to a rate of 112 prisoners per 100,000 inhabitants. A decade later, the number of inmates in Spanish prisons reached 63,248, with a rate of 141 prisoners per 100,000 inhabitants. Spain had the highest rate of prisoners per 100,000 inhabitants among the 15 countries of the European Union before its enlargement to the East (Fig. 2).

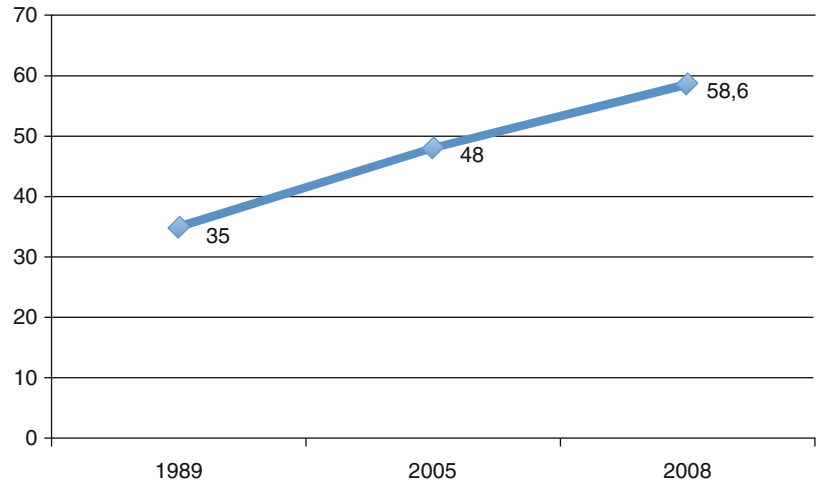
Victimization Rates

▶ Victimization rates found in the three surveys conducted in Spain by UNICRI in 1989 and 2005 (Van Dijk, Van Kesteren, & Smit, 2007) and by the Spanish Crime Observatory (ODA) in 2008 (García España, 2009) show a downward trend for crime experiences occurring both in the year preceding the survey and within the 5 years prior to the survey. Common crime in Spain has been decreasing steadily over the past 20 years according to figures resulting from victimization surveys. While these results are in line with those of the 2008 National Crime Victimization Survey carried out in the United States, which point to a clear decrease in violent and property crimes in the past decade, they contrast with the upward trend of Spanish police statistics, with social perceptions of crime – as will be confirmed below – and, above all, with the political discourse which has been using the alleged rise in crime to implement all kinds of draconian populist initiatives.

The most frequent type of crime in Spain, despite an enormous decline over the past several decades, is theft of property from a car. Larceny, which ranks second, is escalating. Violent crimes, such as robbery with either violence or intimidation and assaults and threats, occur much less frequently, both showing a downward trend, despite the upturn in assaults and threats in 2005.



Crime Trends in Spain, Fig. 2 Prison population per 100,000 inhabitants UE-15. (Source: *Oxford centre for prison studies*)



Crime Trends in Spain, Fig. 3 Trend in crime reported to the police in Spain from the past year for 9 crimes (%). (Source: ODA 2009)

Bicycle theft and sexual offenses fall into last place after declining in 2005 and remaining stable in 2008.

Rate of Crimes Reported

In contrast, the rate of crimes reported to the police by the surveyed victims show a steady increase in the last two decades (Fig. 3). It is interesting to point out certain findings concerning the relationship between victimization and reported offenses, as well as the reason for reporting. These findings help us to understand the difference between the trend in crime reflected in official statistics and in victimization surveys. Offenses most commonly reported to the police by victims over the 5 year to 2008 were car theft (90.5 %),

motorcycle theft (76.9 %), and burglary (63.6 %). Examining the reasons for reporting, we found that the majority of those who reported a crime did so because they believed it was their civic duty. Another piece of information that provides insight into the rise in reporting rates is that 80 % of Spaniards believe that the police is the most trustworthy institution within the Spanish criminal justice system.

The Social Perception of Crime Trends

Although the results of victimization surveys show a significant decrease in crime in Spain, ▶ public opinion has a different perception of this trend. The majority of Spaniards mistakenly believe that crime has increased. However, this distorted view of reality is not reflected in the ▶ fear of crime, given that Spaniards feel fairly safe walking alone in their neighborhoods after dark and very safe staying home alone after dark. The explanation seems to be in the recurring coverage of crime-related news to which the public is exposed through mainstream media.

Conclusions

Spain's social structure has changed dramatically in the past two decades. These changes, along with an upward trend in offenses known to the police and an exorbitant increase in prison population, reflected in the official statistics, supported the hypothesis that crime in Spain was increasing.

▶ Victimization surveys show a steady decrease in crime between 1989 and 2008. By crime type, this decrease is seen in all criminal activity except for larceny, which after decreasing slightly in 2005, it surpassed the 1989 rate in 2008.

At last, we can conclude that in Spain everything has changed, but nothing has happened. Namely, Spanish society has experienced major social and demographic changes in the past 20 years, without involving any increase in ▶ crime experienced by victims.

Cross-References

▶ Crime
▶ Economic Growth
▶ Education
▶ Fear of Crime
▶ Inequality
▶ Population Pyramid
▶ Public Opinion
▶ Victimization

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Crime-Related Self-Report Inventory

▶ Self-Report Measures of Crime and Delinquency

Crimes Judged

▶ Conviction Statistics as Measures of Crime

Crimes Known

▶ Conviction Statistics as Measures of Crime

Criminal Behavior

► Deviance

Criminal Behavior in Families

► Family Features and Violent Behavior

Criminologies of Everyday Life

► Impact of Housing Design on Crime

Criteria for Selecting Indicators

► Indicator Selection Criteria

Criteria to Classify People as Poor or Nonpoor

► Poverty Lines

Criterion Validity

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Definition

Criterion validity is a method of test validation that examines the extent to which scores on an inventory or scale correlate with external, non-test criteria (Cohen & Swerdlik, 2005).

Description

The ultimate aim of criterion validity is to demonstrate that test scores are predictive of real-life outcomes. The basic paradigm for this approach is to give the instrument to a group of individuals and to collect measures of some criterion of interest (e.g., health status, responsiveness to psychotherapy, work performance). There are two variants to this paradigm. The first is called ► *concurrent validity*, where both the test scores and criterion measure are collected at the same time. The second is called ► *predictive validity* where criterion ratings are obtained at some point after the test scores were obtained. Concurrent paradigms tend to generate higher validity coefficients than predictive paradigms because the passage of time will tend to attenuate correlations between the two sets of scores.

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Critical Difference

► Reliable Change Index

Critical Disability Theory

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Synonyms

Disability; Equality; Equity; Human rights

Definition

Critical disability theory is rooted in a critique of traditional discourses and assumptions of ▶ disability which serve to oppress persons with disabilities and infringe on their ▶ human rights. The theory is built upon the argument that "disability is not fundamentally a question of medicine or health, nor is it just an issue of sensitivity and compassion; rather, it is a question of politics and power(lessness), power over, and power to" (Devlin & Pothier, 2006, p. 2). This perspective challenges able-bodied supremacy and the oppression that arises from restricting economic and social benefits to persons with disabilities which are then redistributed as privileges to be negotiated (Oliver & Barnes, 1993; Rioux & Frazee, 1999; Rioux & Prince, 2002). Critical disability theory moves away from the individual pathology of disability (based on the biomedical model), and beyond liberalism and a social model of disability, toward a human rights approach that argues for equal access to all aspects of social life including transportation, housing, economic entitlements, health, education, and employment (Oliver & Barnes, 1993) as well as "key sites of power and privilege" (Hughes & Paterson, 1997, p. 325). As Williams (2001) states, "If disability is seen as a personal tragedy, disabled people are treated as the victims of circumstance. If disability is defined as social oppression, disabled people can be seen as the collective victims of an uncaring discriminatory society" (p. 134; also see Hughes & Paterson, 1997; Oliver, 1993). From this perspective, the challenges experienced by persons with disability can only be addressed once the human rights of persons with disabilities are formally enshrined in law and resources are appropriately and fairly allocated to citizens (Hughes & Paterson, 1997; Oliver, 1993; Williams, 2001).

Description

Critical disability theory is based on a human rights approach to disability (Bichenbach, 2001; Rioux, 1997, 2003; Rioux & Prince, 2002) and the oppression theory of disability (Oliver, 1993; Williams, 2001). The oppression theory of disability originated in the United States during the early 1960s from members of the disability movement (Bichenbach, 2001) who were inspired by critical theory and ▶ feminism (Devlin & Pothier, 2006). The movement was driven by people with disabilities seeking to emancipate themselves from oppressive social policies, practices, stereotypes, and research (Kaufman, 2003) which patronized, medicalized, and rationalized oppression (Neath & Schriner, 1998). The application of the theory is most dominant in the discipline of disability and legal studies (see work by Bagenstos, 2003, 2004a, b; Blanck, Wilichowski & Schmeling, 2004; Kanter, 2003). The goal is to secure rights "based on humanity rather than economic contribution and rights are equated with those of all others in society" (Rioux, 2003, p. 296). Devlin and Pothier (2006) assert that "the biggest challenge comes from mainstream society's unwillingness to adapt, transform, and even abandon its 'normal' way of doing things" (p. 27). This approach holds society responsible for providing economic and social supports to enable "social and economic integration, self-determination, legal and social rights" (Rioux, 2003, p. 296). This perspective challenges dominant ideologies that disability is solely a medicalized condition inherent to the individual in need of treatment by doctors and therapists. Alternatively, disability is accepted as an inherent part of society; thus, "treatment" lies in the reformation of economic, social, and political policies and the redistribution of power, control, and autonomy to persons with disabilities.

Critical disability theory is "a self-consciously politicized theory. Its goal is not theory for the joy of theorization, or even improved understanding and explanation; it is theorization in the pursuit of empowerment and substantive, not just formal, ▶ equality" (Devlin & Pothier, 2006, p. 8). The application of a critical approach to exploring and understanding disability directly relates to quality of life. The ways in which disability is conceived have ramifications that

extend beyond academia to the lives of persons with disabilities. How disability is conceived ultimately affects the rights of persons with disabilities and the way they are treated (Rioux, 1997, 2003; Williams, 2001). Rioux (2003) asserts that "how disability is perceived, diagnosed, and treated, scientifically and socially, is reflected in assumptions about the social responsibility towards people with disabilities as a group" (p. 289). The impact that constructions of disability have on the lives of persons with disabilities (and society as a whole) cannot be understated, especially when such conceptions have historically been offensive to persons with disabilities and have led to oppression and exclusion from critical aspects of civic life. Critical disability serves as a lens through which to examine how resources and power are allocated within society. The ultimate goal is to enhance the quality of life of persons with disabilities since:

> . . .not all share equally in the good life, or feel adequately included. Among those who face recurring coercion, marginalization, and social exclusion are persons with disabilities. . .The consequence, we suggest, is a system of deep structural economic, social, political, legal, and cultural inequality in which persons with disabilities experience unequal citizenship, a regime of dis-citizenship (Devlin & Pothier, 2006, p. 1).

Cross-References

- ▶ Disability
- ▶ Equality
- ▶ Equity
- ▶ Feminism
- ▶ Human Rights

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Critical Feminist Eco-socialism

► Ecofeminism

Croatia, Personal Well-Being Index

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Synonyms

Happiness in Croatia; Personal well-being index; Well-being in Croatia; Well-being, subjective

Definition

The Personal Well-being Index (PWI) is an instrument for assessing the person's satisfaction with eight life domains such as standard of living, achievement in life, personal health, personal relationship, personal safety, community connectedness, future security, and spirituality (The International Well-being Group, 2006).

Description

Following the increased interest in measuring population well-being in the countries around the world, systematic research on well-being in Croatia has been started since 2003 at the Ivo Pilar Institute of Social Sciences (as a part of the project *Psychosocial Indicators of Quality of Life* and *Development of National Indicators of Quality of Life* funded by grants from the Ministry of Science, Education and Sport of the Republic of Croatia). Most of these studies were done on the large nationally representative samples with the aims to explore the well-being of the citizens and its predictors (Kaliterna Lipovcan & Prizmic Larsen, 2006a, b, 2007; Kaliterna Lipovcan, Prizmic Larsen, & Brkljacic, 2011). Also, they provide continuous monitoring of personal and national well-being in the country through the years. In these studies, the International Well-being Index (IWI; Cummins, 2002; The international Well-being Group, 2006) has been used as one of the subjective well-being measures. It allows comparison of well-being across the nations and it is a useful tool for policy makers for identifying and enhancing the areas with lowest satisfaction ratings.

Originally, the first Croatian translation of personal well-being items was from the Comprehensive Quality of Life Scale (Cummins, 2002) which measured importance of and satisfaction with seven specific life domains (material status, health, achievement in life, relationships with family and friends, feelings of physical safety, acceptance by the community where they live, and their happiness). As such, it was used as a well-being measure on the representative sample of Croatian citizens in 2003 (Kaliterna Lipovcan & Prizmic Larsen, 2007). Later, part of this scale was transformed into the International Well-being Index where only satisfaction with domains was measured (The international Well-being Group, 2006). It consists of two scales: Personal Well-being Index (PWI) which measures satisfaction with eight life domains, where the original item about happiness was replaced with the item about satisfaction with future security. At the same time, the item about satisfaction with spirituality domain was added. A second scale is the National Well-being Index (NWI) which measures satisfaction with six national domains (NWI: satisfaction with economy, environment, social conditions, government, business, national security). In our surveys, both indices were assessed on an 11-point rating scale (from 0 to 10), and results were presented in percentage of scale maximum (SM) and converted into the 0–100 scale. Two ways of scoring were used. The first was to obtain the score for each of the personal and national domains. The second was to calculate two average scores across all personal and

national domains, separately. Those IWI indices were then continuously used to monitor the well-being of Croatia's citizens in the years 2005, 2007, and 2008 (Kaliterna Lipovcan & Prizmic Larsen, 2006a, b; Kaliterna Lipovcan et al., 2011).

The psychometric characteristic of IWI indices, their correlates with demographic variables, and their predictive values for other variables were reported in the study conducted in 2008, from which the PWI results are summarized in this entry (Kaliterna Lipovcan et al., 2011). Participants were a representative sample of Croatian citizens with N of 4, 000 and age 18 and plus years. They were chosen as a multistage probability-based sample of Croatian population. The survey was conducted by "face-to-face" interviews in the participant's homes. An exploratory factor analysis using varimax rotation was performed on IWI measure. The 14 domains formed two clear factors accounting for 57 % of the variance in Croatian sample (Table 1).

Croatia, Personal Well-Being Index, Table 1 Results of the factor analysis of IWI

IWI Items	Factor 1	Factor 2
Standard of living	.61	.37
Personal health	.71	.15
Achievement in life	.75	.25
Personal relationships	.79	.06
Personal safety	.69	.30
Community-connectedness	.72	.21
Future security	.56	.50
Spirituality	.61	.13
Economic situation	.25	.77
Natural environment	.24	.63
Social conditions	.20	.83
Government	.09	.86
Business	.16	.78
National security	.24	.63
% of explained variance	29	28

The PWI factor with eight items was best defined with satisfaction with personal relationships with family and friends, while the NWI factor with six items was best defined with satisfaction with the government. PWI and NWI demonstrated adequate internal consistency with Cronbach alpha 0.87 for each scale.

Concerning the Personal Well-being Index, the overall average was 68 ± 17.2 which was lower than the reported average for Western nations of 75 points (Cummins, Eckersley, Pallant, van Vugt, & Misajon, 2003). The range of PWI domains scores was from 57 (future security) to 82 (personal relationships) points. Means and standard deviations with zero-order correlation matrix for eight PWI domains are presented in Table 2. The PWI factor with eight items was best defined with satisfaction with personal relationships with family and friends, while the NWI factor with six items was best defined with satisfaction with the government. PWI and NWI demonstrated adequate internal consistency with Cronbach alpha 0.87 for each scale.

Croatia, Personal Well-Being Index, Table 2 Means, standard deviations, and zero-order correlation coefficients among eight domains of PWI

	Means ± SD	1	2	3	4	5	6	7
1. Standard of living	58 ± 24.2	–	–	–	–	–	–	–
2. Personal health	67 ± 25.8	.51**	–	–	–	–	–	–
3. Achievement in life	66 ± 23.4	.64**	60**	–	–	–	–	–
4. Personal relationships	82 ± 21.1	.39**	.47**	.52**	–	–	–	–
5. Personal safety	70 ± 23.6	.43**	.43**	.45**	.51**	–	–	–
6. Community-connectedness	74 ± 22.9	.37**	.38**	.46**	.57**	.61**	–	–
7. Future security	57 ± 25.2	.53**	.41**	.53**	.37**	.55**	.47**	–
8. Spirituality	72 ± 23.9	.28**	.31**	.38**	.47**	.36**	.43**	.35**
Overall PWI	68 ± 17.2							

**$p < .01$

All domain intercorrelations were significant. The differences in PWI domains were examined between male and female, four age groups (18–35, 36–50, 51–60, 66+ years), and four income groups. No gender differences were found in overall PWI score. However, in regard to specific domains, the women in our sample were more satisfied with their relationship with family and friends as well as with their spirituality, compared to their male counterparts. The decline in overall PWI was reported with age. Significant decline satisfaction was observed in domains of health, achievement, and security by age groups. The youngest group was more satisfied with achievement than middle-age group, while the oldest was the least satisfied with their health and security than other age groups. In general, people with higher income reported higher personal well-being. That was true also for all domains expect for spirituality. More than 20 points differences between the lowest and highest income groups were found in "standard of living" and "health" items, while smaller gaps, less than 10 points differences, were found for "personal relationship" and "acceptance by the community" items.

Multiple regression with each domain regressed against the item "satisfaction with life as a whole" (SLAW) revealed that six domains made significant unique contribution in explaining the variance of satisfaction with life. Higher satisfaction with standard of living, achievement in life, personal health, personal relationship, community connectedness, and future security domains predicts higher satisfaction with life as a whole. The highest significant contribution was achievement and standard of living, while the lowest were community connectedness and personal relationship. The two domains that made no significant contribution to life as a whole were personal safety and spirituality. Previous studies have also found that standard of living and life achievement make the largest unique contribution to predicting life as a whole, while personal safety generally does not make significant contribution (Lau, Cummins, & McPherson, 2005). The whole model explained in total 47 % of variance, with all eight domains contributing 7.8 % in unique variance and sharing 39.2 % of variance between them. The results of multiple regression and zero-order correlation coefficients between domains and SLAW are presented in Table 3.

Croatia, Personal Well-Being Index, Table 3 Correlation coefficients and results of the regression analyses of the PWI on satisfaction with life as a whole (SLAW)

	SLAW	B	p-value	β
1. Standard of living	.56**	.19	<0.001	.21
2. Personal health	.55**	.18	<0.001	.20
3. Achievement in life	.61**	.22	<0.001	.24
4. Personal relationships	.44**	.07	<0.001	.07
5. Personal safety	.42**	.01	0.421	.01
6. Community-connectedness	.40**	.05	<0.003	.05
7. Future security	.46**	.07	<0.001	.08
8. Spirituality	.32**	.02	0.065	.02
Multiple R	.69**			

**$p < .01$; Adjusted $R^2 = .47$

PWI, as a tool to measure the subjective well-being of populations, was used in four surveys in Croatia conducted in 2003 (Kaliterna Lipovcan & Prizmic Larsen, 2006a; 2007), 2005 (Kaliterna Lipovcan & Prizmic Larsen, 2006b), 2007 and 2008 (Kaliterna Lipovcan et al., 2011) and as such it showed utility in identifying the best and the lowest domains that people are satisfied with. Consistently through the years, Croatia citizens were the most satisfied with relationship with family and friends, and it has been steadily rated within the range of 70–80 % SM found for Western populations. Contrary, Croatia citizens were the least satisfied with standard of living which was till 2008 rated as the lowest domain within the range of 60–70 % SM typical for the non-Western countries. The last 2008 survey indicated that citizens were concerned with future security which was rated as the lowest in terms of satisfaction. It reflected unstable economic and financial situation in Croatia at the time. Besides the economic indicators, in order to understand the well-being of population, PWI

shows as a useful tool. Policy attention in Croatia may be directed to those with older age and of lower income status who reported lower PWI and domain scores.

Cross-References

- ▶ Personal Well-being Index
- ▶ Satisfaction with Life as a Whole

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Croatian/Serbian Intermarriage

▶ Ethnic Intermarriage and Social Cohesion in Yugoslavia

Crohn's Disease

▶ Health-Related Quality of Life and Inflammatory Bowel Disease

Crohn's Disease Activity Index

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Synonyms

CDAI

Definition

The Crohn's Disease Activity Index or CDAI is a disease-specific severity index developed in 1976 (Best, Becktel, Singleton, & Kern, 1976) used to quantify the activity of Crohn's disease in adults. Its component scores are based on both clinical and laboratory data. The CDAI is not used to diagnose Crohn's disease (CD), but rather it is a research tool that has been widely used in research and clinical trials to assess the response of patients with Crohn's disease to new therapies (Hanauer et al., 2002; Sands et al., 2004). The CDAI has eight domains, each of which evaluates a specific aspect of CD. The score of each domain is weighted, with the final CDAI score being the sum up of the eight individual domain values. The CDAI records symptoms over the previous 7 days.

Description

Development of the CDAI

The CDAI was developed as part of the National Cooperative Crohn's Disease Study (NCCDS) in 1976 in order to measure the clinical activity of Crohn's disease in clinical trials (Best et al., 1976; Yoshida, 1999). Items were suggested by gastroenterologists from 13 participating university centers with experience in treating CD. They agreed on 18 items based on their clinical observations and experience.

The initial list of 18 items was tested prospectively on 112 participants with known CD. The 112 patients made 186 visits and were given a one-week diary of symptoms to complete. At each visit, patients were also assessed by gastroenterologists using a global physician assessment tool. This was based on their impression of the patient's disease activity (very well = 1, fair to good = 3, poor = 5, very poor = 7). Multiple regression analysis of the 18 items was carried out in order to identify which items correlated well with the physician global assessment. Following statistical analyses, the number of items in the CDAI was reduced from 18 to 8. In addition, a weighting scale was introduced for each of the final items (see Table 1).

Crohn's Disease Activity Index, Table 1 Final components of the CDAI, their weighting, and whether they are completed by the patient or the clinician/clinical findings (Best et al., 1976)

Clinical or laboratory variable	Patient or physician	Weighing
1. Number of liquid or very soft stools each day for seven days	Patient	×2
2. Abdominal pain score each day for seven days (0 = none, 1 = mild, 2 = moderate, 3 = severe)	Patient	×5
3. General well-being (0 = generally well, 1 = slightly below par, 2 = poor, 3 = very poor, 4 = terrible)	Patient	×7
4. Number of extraintestinal manifestations	Physician	×20
Arthritis/arthralgia		
Iritis/uveitis		
Erythema nodosum/pyoderma		
Gangrenosum/aphthous		
Stomatitis		
Anal fissure, fistula, or abscess		
Other fistula		
Fever over 100 °F during past week		
5. Taking antidiarrheal medication (1 = yes, 0 = no)	Physician	×30
6. Abdominal mass (0 = none, 2 = questionable, 5 = definite)	Physician	×10
7. Haematocrit (male: 47-critg, female 42-crit)	Physician	×6 (add or subtract according to sign)
8. Body weight (percent below standard weight (by normogram)). The maximum weight deduction of 10%	Physician	×1 (add or subtract accordingly)

Using the CDAI

In order to generate the CDAI score, the patient completes a three-item diary which records the first three items on the scale: the number of liquid or very soft stools per day over a one-week period, the degree of abdominal pain on a scale of 0–3, and general well-being on a scale of 0–4. In addition to these patient-completed items, at the time of the clinical assessment, the remaining five items are completed based on the clinical findings. These are extraintestinal manifestations (one point is added for each), use of antidiarrheal drugs, percentage deviation from standard weight, hematocrit of <0.47 in men and <0.42 in women (Hct or packed cell volume (PCV)), and abdominal mass (Best et al., 1976; Yoshida, 1999). Each of the 8 items is then scored and multiplied by its appropriate weighting factor. The sum of the weighted item scores gives the final CDAI score.

Remission of Crohn's disease has been defined as a fall in the CDAI to less than 150, with severe disease being defined as a value of

greater than 450 (Best et al., 1976). Research studies assessing the benefit of medication for Crohn's disease have defined the response to treatment as a fall in CDAI of greater than 70 points (Hanauer et al., 2002; Sands et al., 2004).

Validity and Reliability of the CDAI

The CDAI is considered to be the gold standard for assessing disease activity in Crohn's disease and has been used for over 30 years in clinical trials. However, limited work has been carried out to validate the index (Jorgensen et al., 2005; Yoshida, 1999). Formal validity testing of the CDAI was not reported in the original article in 1976 (Best et al., 1976).

In addition, the original CDAI article (Best et al., 1976) did not include any formal testing regarding the reliability of the CDAI (Yoshida, 1999). The article did however document that there was a positive correlation between changes in CDAI scores and the physician global assessment in 32 patients who had two consecutive visits (test-retest reliability).

The CDAI does not always correlate well with the laboratory and endoscopic parameters of inflammation (Cellier et al., 1994; Crama-Bohbouth et al., 1989; Filik, Dagli, & Ulker, 2006; Gaya et al., 2005), and this may be because CDAI is heavily weighted toward subjective items which do not always go hand in hand with the inflammatory nature of Crohn's disease. For patients with Crohn's disease who have had a terminal ileum resection, the CDAI alone has been found not to be suitable for assessing patients (Viscido, Corrao, Taddei, & Caprilli, 1999; Walters et al., 2010).

Studies have shown a considerable variation in the use of CDAI among researchers and physicians (de Dombal & Softley, 1987; Sands & Ooi, 2005) which may affect the comparability of studies and may introduce random error into the measurement to the CDAI.

Further Developments

The scoring the CDAI can be cumbersome and as such can limit its use in daily practice (Yoshida, 1999). It usually requires a calculator to formulate the final score (online calculators are available (CDAI calculator and a 7-day diary (Harvey & Bradshaw, 1980)). In response this, the Harvey-Bradshaw index was devised in 1980 as a simpler version of the CDAI. It consists only of clinical parameters over a 24-h period (Harvey & Bradshaw, 1980). A version of CDAI has been developed for use in surveys because the original CDAI was not suitable for survey purposes as it requires clinical and laboratory parameters (Sandler, Jordan, & Kupper, 1988). A pediatric CDAI has also been developed which is suitable for use in children with Crohn's disease (Hyams et al., 1991).

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Cronbach's (Alpha)

▶ Inter-item Correlations

Cronbach's (Alpha) Coefficient

▶ Reliability Coefficient

Cronbach's Alpha

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Synonyms

Alpha Reliability; Kuder-Richardson KR20 Formula; Reliability Coefficient

Definition

Cronbach's alpha is an estimator of test ▶ reliability measured as the ▶ internal consistency or inter-item homogeneity of the test score.

Description

Cronbach's alpha is an estimator of test ▶ reliability that is suitable for use in single applications of a test, typically in cross-sectional designs. Given a test composed of p items, Cronbach's alpha assumes that all items are equivalent test units and corresponds to the reliability of the full test computed by extending the properties of one unit p times. This procedure is conceptually analogous to split-halves reliability, where two parts of the same test are correlated to estimate the reliability of the full test.

Alpha measures the degree to which the items yield similar scores and must be interpreted as the proportion of measurement variance attributable to changes in individual's true-score ranges. As a reliability index, coefficient alpha ranges between 0 and 1, although negative values can be obtained if the average inter-item covariance is negative (usually due to reverse coding of the items). All other things held equal, alpha increases as a function of the size of item correlations and the number of items. Recent developments for the computation of the standard error of alpha allow for inferences about this reliability index.

Estimation of Cronbach's Alpha

Given a test composed p items, the alpha coefficient (Cronbach, 1951; Guttman, 1945) estimates the population ▶ reliability of a test score as

$$\alpha = \frac{p}{p-1}\left(1 - \frac{\sum_i \sigma_{ii}}{\sum_i \sigma_{ii} + 2\sum_{i<j} \sigma_{ij}}\right) \quad (1)$$

where $\Sigma_i \sigma_{ii}$ is the sum of item variances and $\Sigma_{i<j}\, \sigma_{ij}$ is the sum of item covariances.

Formula (1) is closely related to the Spearman-Brown prophecy formula when taking each of p tau-equivalent items (i.e., items with equal covariances) as unit tests. Notice that as the Kuder-Richardson formula (KR20) is a particular case of alpha, both formulas would obtain identical estimates with dichotomous items.

In addition to classical test theory assumptions, Cronbach's Alpha requires to assume tau-equivalent items (Lord & Novick, 1968), which implies that the items follow a unidimensional factor model with equal factor loadings (McDonald, 1999).

When the items are standardized and summed to obtain a test score (and therefore assuming items to have equal population variances) Alpha is computed as

$$\alpha_{stand} = \frac{p\bar{\sigma}_{ij}}{1 + (p-1)\bar{\sigma}_{ij}} = \frac{p\bar{\sigma}_{ij}}{1 + (p-1)\bar{\sigma}_{ij}} \quad (2)$$

where $\bar{\sigma}_{ij}, \bar{\rho}$ are the average covariances and correlations, respectively. In most cases this standardized version will be less than or equal to the unstandardized version to the extent that differences between item variances are present. However, standardized alpha is prone to bias and values well over the unstandardized version can be obtained in individual samples.

Alpha converges rapidly to its asymptotic properties, and its estimates are known to behave well even when sample size is restrictive. Coefficient alpha is known to be sufficiently accurate with $n = 100$ for true alpha values about 0.6, regardless of test length. Longer tests may yield quite stable estimates for alpha values over 0.7 with sample sizes of just $n = 50$ (Duhachek, Cughan, & Iacobucci, 2004; Maydeu-Olivares, Coffman, & Hartmann, 2007).

Alpha Standard Error and Confidence Intervals

Early derivations of a sampling distribution for alpha made restrictive assumptions on item parameters, making the corresponding standard errors highly sensitive to departures from these assumptions. More recently, van Zyl, Neudecker and Nel (2000) proved that just with the assumption of item multivariate normality, formula (1) follows an asymptotically normal distribution N (0,Q), with Q being

$$Q = \frac{2p^2}{(p-1)^2(\mathbf{1}'\Sigma\mathbf{1})^8} \times \left[(\mathbf{1}'\Sigma\mathbf{1})\left(tr\Sigma^2 + tr^2\Sigma\right) - 2tr\Sigma\left(\mathbf{1}'\Sigma^2\mathbf{1}\right)\right] \quad (3)$$

where $\mathbf{1}$ is a $p \times 1$ column vector of ones and Σ is the inter-item population covariance matrix. Alpha normal-theory asymptotic standard error can be computed as $\sqrt{Q/n}$, where n is sample size (Duhachek & Iacobucci, 2004). Given the standard error of alpha, the lower and upper limits of a $1–c$ % confidence interval level can be computed as

$$\text{Lower limit} = \alpha - Z_c\sqrt{Q/n};\ \text{Upper limit} = \alpha + Z_{1-c}\sqrt{Q/n} \quad (4)$$

where Z is the standardized normal value for 1-c and c. Robust standard errors have been derived (Maydeu-Olivares et al., 2007) and are known to be accurate with skewed items and small item intercorrelations.

Interpretation

As a reliability index, Cronbach's alpha must be mainly interpreted in terms of the proportion of score variance attributable to changes in true score. It is agreed that values above 0.7 are generally acceptable (Nunnally & Bernstein 1994). A 0.90 cutoff has been recommended for

individual assessments (Hays & Revicki, 2005), where ▶ measurement error is of greater concern.

Cronbach's alpha is arguably the most widely used estimator of reliability. However, there is increasing concern in the psychometric literature about the use of alpha in applications (Sitjsma, 2009). Criticisms about the estimator advise to take some precautions when interpreting alpha:

- Alpha will approach true reliability to the extent that items conform to tau-equivalence. In applications, coefficient alpha is negatively biased so that it implies a lower bound for test reliability.
- Alpha values can never coincide with true reliability in a single administration (Sijtsma, 2009). As the point-estimate is negatively biased with respect to actual reliability, confidence intervals must be provided to indicate the precision of alpha estimates.
- Alpha provides no information about test dimensionality. On the contrary, it requires unidimensionality to yield accurate estimates of true reliability (McDonald, 1999). As Alpha is a function of item interrelatedness, which is not necessarily a consequence of unidimensionality, the one-factor structure must be checked prior to alpha estimation.
- Alpha is always less than or equal to the closest lower bound to the true reliability. Moreover, alpha only coincides with the closest lower bound under restrictive conditions. It is recommended that better estimators of the closest lower bound of true reliability such as Guttman's lambda-2 (Guttman, 1945), which are available in widespread statistical packages, are provided in addition to alpha.

Cross-References

▶ Internal Consistency
▶ Reliability

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Cross National Comparison

▶ Cross-Cultural Comparison

Cross Product Ratio

▶ Odds Ratio

Cross-Classified Hierarchical Linear Modeling

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Synonyms

Cross-classified multilevel models; Crossed random effects models

Definition

Cross-classified hierarchical linear modeling is an extension of standard hierarchical linear modeling for nonhierarchical data that have cross-classified structures.

Description

Traditional multilevel models involve hierarchical data structures whereby lower level units such as students are nested within higher level units such as schools and where these higher level units may in turn be nested within further groupings or clusters such as school districts, regions, and countries. With hierarchical data structures, there is an exact nesting of each lower level unit in one and only one higher level unit. For example, each student attends one school, each school is located within one school district, and so on. However, social reality is more complicated than this, and so social and behavioral data often do not follow pure or strict hierarchies. Two types of nonhierarchical data structures which often appear in practice are cross-classified and multiple membership structures. In this encyclopedia entry, we describe cross-classified data structures and cross-classified hierarchical linear modeling which can be used to analyze them.

In cross-classified data there is not an exact nesting of each lower level unit in one and only one higher level unit. Rather, lower level units belong to pairs or combinations of higher level units formed by crossing two or more higher level classifications with one another. An example in educational research arises in studies of student attainment where students are nested within schools but are also nested within neighborhoods. However, schools and neighborhoods are not typically nested within one another as not all students from the same school live in the same neighborhood nor do all students from the same neighborhood attend the same school. Rather, schools and neighborhoods are crossed with one another, with each student potentially belonging to any combination of school and neighborhood. Students are described as nested within the cells of the two-way cross-classification of schools by neighborhoods. An example in health services research arises in studies of hospital patient outcomes. Hospitals and general practitioners (GPs, i.e., family doctors) are cross-classified as GPs tend to refer their patients to different hospitals depending on patient need while hospitals typically treat patients who have been referred by many different GPs.

The cross-classified model for the above educational research example, where we adjust for a single covariate, can be written using "classification notation" (Browne, Goldstein, & Rasbash, 2001) as

$$
\begin{aligned}
y_i &= \beta_0 + \beta_1 x_i + u^{(2)}_{\text{school}(i)} + u^{(3)}_{\text{neigh}(i)} + e_i \\
u^{(2)}_{\text{school}(i)} &\sim N(0, \sigma^2_{u(3)}) \\
u^{(3)}_{\text{neigh}(i)} &\sim N(0, \sigma^2_{u(2)}) \\
e_i &\sim N(0, \sigma^2_e)
\end{aligned}
$$

where y_i denotes the attainment of student i, β_0 is the model intercept, x_i denotes the value of the covariate for that student, β_1 is the associated slope coefficient, $u^{(2)}_{\text{school}(i)}$ and $u^{(3)}_{\text{neigh}(i)}$ denote the school and neighborhood random effects for that student, and e_i denotes the student-level residual error. The subscripts ***school(i)*** and ***neigh(i)*** are "classification functions" which return the school attended and neighborhood resided in by student ***i***, respectively. The (2) and (3) superscripts and subscripts are used to distinguish the different classifications from one another; convention has it that (1) superscripts and subscripts are not presented for e_i and σ^2_e but are implicit. The random effects and residual errors are assumed normally distributed with zero means and constant variances where $\sigma^2_{u(3)}$ denotes the between-school variance, $\sigma^2_{u(2)}$ denotes the between-neighborhood variance, and σ^2_e denotes the student-level residual error variance. The magnitudes of the variance components may then be compared to make statements about the relative contribution of each classification to the variation in the response, having adjusted for the covariate.

It is important to incorporate cross-classified structures into our models when they arise in the data and are thought to lead to substantial

clustering in the outcome under study. Ignoring cross-classified structures, by accounting for some nesting factors but not others, will typically lead us to overstate the relative importance of the factors that we do account for. This in turn may lead us to draw misleading conclusions about the relative importance of different sources of influence on the outcome (Luo & Kwok, 2009, 2012; Meyers & Beretvas, 2006). Thus, in our educational research example, accounting for schools, but ignoring neighborhoods, will likely lead us to overestimate the importance of schools. Similarly, in our health services research example, accounting for hospitals but ignoring GPs will likely lead us to overestimate the importance of hospitals.

An important, but often overlooked, extension to cross-classified models is to allow for random interaction effects between the units of the different higher level classifications. This extension relaxes the assumption that the higher level units have additive effects. Note, however, that random interaction effects are not identified when there is only one observation per cell of the cross-classification as in this situation the random interaction effects will be confounded with the error. In our educational research example, school-neighborhood combinations will often contain multiple students and so random interaction effects can be included. Doing so allows the effect that a student's school has on them to depend on the neighborhood they live in and the effect that their neighborhood has on them to depend on which school they attend. Including random interaction effects therefore allows for the fact that schools are likely to have different effects for students from different neighborhoods and vice versa. When school and neighborhood level variables are included in the model, we can choose to additionally include interactions between these variables to attempt to explain the variation in the random interaction effects across the cells of the cross-classification. Failure to account for random interaction effects will lead us to biased estimates of the other variance parameters included in the model (Shi, Leite, & Algina, 2010).

Cross-classified models can be estimated by both frequentist (e.g., maximum likelihood) and Bayesian (e.g., Markov chain Monte Carlo, MCMC) estimation. Several software packages provide specific routines for fitting these models including the general-purpose packages R, SAS, SPSS, and Stata and the specialized multilevel modeling packages HLM and MLwiN (Rasbash, Charlton, Browne, Healy, & Cameron, 2009). MLwiN can be run from within both the R and Stata software (Leckie & Charlton, 2013; Zhang, Charlton, Parker, Leckie, & Browne, 2012). For complex models, for example, with discrete responses or many different crossed classifications, Bayesian estimation will often be considerably more computationally efficient than frequentist estimation. Of the aforementioned packages, only MLwiN allows cross-classified models to be fitted by Bayesian methods (Browne, 2012, Chap. 15) in addition to frequentist methods (Rasbash, Steele, Browne, & Goldstein, 2012, Chap. 18).

The social and behavioral data that arise from social reality will often have far more complex data structures than those given in the educational and health services research examples above. To realistically model this complexity, we must often include further classifications in our models leading to three-way and four-way cross-classified models. In our educational research example, we may choose also to include the effects of schools from an earlier phase of schooling to account for potential carry-over effects of these schools on student attainment. Students are then nested within the cells of a three-way cross-classification of high schools by junior schools by neighborhoods. Further hierarchical structures may also need to be incorporated into the model. For example, if our educational data are from an international comparative study, we may want to incorporate country effects on student attainment. Very few students will move countries and so the high schools, junior schools, and neighborhoods are nested within countries. In our health services research example, we could include ward effects as a third cross-classifying factor to account for within-hospital-between-ward variation. Were we to have repeated measurements on patients' outcomes during their stay in hospital, we would

add measurement occasion as a new lowest level to the model.

The last two examples have shown how complex multilevel models can become when we try to extend them to realistically reflect the complex data structures that arise in social reality. Unit diagrams and classification diagrams have both been proposed as helpful aides to understanding and communicating complex multilevel data structures (Browne et al., 2001). Similarly, classification notation, which avoids the proliferation of subscripts that arises when we combine many different data structures in a single model, has been proposed as an alternative to standard notation when expressing these models in equation form (Browne et al., 2001).

An interesting use of cross-classified models is in panel data. In multilevel analysis, most panel data is treated as two-level where time is nested within panels. This is the case in individual panel surveys where measurement occasions are nested within individuals. However, in longer panels where there are many time points and where we might expect the outcome to vary systematically from time point to time point, we may treat the panels as cross-classified with time. An example is a state-year unemployment panel where we could chose to treat the unemployment measurements as nested within the cells of a cross-classification of states by years. If the panel is balanced, there will be exactly one observation in every cell of the classification. If the panel is unbalanced panel, for example, because unemployment counts were not returned by certain states in a particular year, the associated cells of the cross-classification will be empty. Note that panel data is an example of a cross-classified data structure where it is not possible to identify random interaction effects between the cross-classifying units as there is a maximum of one observation per cell. One could potentially resolve this problem by collecting county level unemployment data within each state-year combination to ensure that we have multiple measurements per cell. One concern with including state and county effects in this example is that each set of effects may be spatially correlated. One solution is to explicitly model these dependencies by including a multiple membership structure in the cross-classification.

Introductory, intermediate, and advanced treatments of multilevel models are given in the multilevel modeling textbooks by Snijders and Bosker (2012), Raudenbush and Bryk (2002), and Goldstein (2011), respectively. Accessible introductions to cross-classified models are given by the report by Fielding and Goldstein (2006) and the book chapter by Beretvas (2010). More advanced treatments of cross-classified models are provided in the multilevel textbook by Goldstein (2011, Chap. 12), the book chapters on cross-classified models by Rasbash and Browne (2001, 2008), the paper by Browne et al. (2001), and the reports by Fielding et al. (2006) and Leckie (2013). Examples of cross-classified hierarchical linear modeling in applied research can be seen in Leckie (2009), Rasbash, Leckie, Pillinger and Jenkins (2010), and Raudenbush (1993) who all model student attainment accounting for the nesting of students within the cross-classification of schools by neighborhoods. Rasbash and Goldstein (1994) model student attainment accounting for the nesting of students within the cross-classification of primary by secondary schools. Leckie and Baird (2011) model the scores awarded by raters to students' essays. The scores are cross-classified by raters and students as each rater scores every student and each student is scored by every rater.

Cross-References

- Hierarchical Linear Modeling
- Mixed Effects Models
- Multilevel Analysis
- Multiple Membership Models
- Variance Component Modeling

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Cross-Classified Multilevel Models

▶ Cross-Classified Hierarchical Linear Modeling

Cross-Cultural Adaptation

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Synonyms

Cross-national adaptation; Cultural adaptation; Translational process, quality of life

Definition

Cross-cultural adaptation is a complex process of choosing, translating, and adapting relevant patient-reported outcome (PRO) measures or questionnaires, from one language or culture to others, to assure comparisons between languages and cultures for the assessment of ▶ health outcomes (Hilton & Strutkowiski, 2002; Hunt, 1999). Then, the translated versions are tested on the target population to verify their characteristics. The goal of cross-cultural adaptation is to produce a measure, which is equivalent to the original one, instead of producing an identical one (Maher, Latimer, & Costa, 2007).

Description

PRO outcome measures and ▶ quality of life (QoL) questionnaires are widely used by health professional around the world for the measurement of health status or treatment outcomes. Due to different levels of research development among countries, most of these instruments and/or questionnaires were developed in English, which, to some extent, limit their applications in other languages and cultures, even when used in different English-speaking countries, such as Canada, ▶ Australia, and the United States, because of the variety cultures and lifestyles. To accommodate these differences, it is necessary that researchers adapt the original version, so that it is comprehensible and relevant to various new settings. This process is called cross-cultural adaptation (Maher et al., 2007; Hilton & Strutkowiski, 2002; Beaton, Bombardier, Guillemin, & Ferraz, 2000; Hunt, 1999).

Selecting a Measure

When researchers need to measure PRO and QoL, they face a dilemma, which means either construct a new instrument or use an available one, which is currently widely used in the literature. For those mostly from non-English speaking countries, this is a difficult decision because the development of a new instrument is time-consuming and costly. On this matter, it is better to use an existing instrument, which has proven to be useful and with adequate levels of ▶ reliability and validity. Furthermore, the process of adaptation allows data collection efforts to be the same in cross-national studies. Thus, it is better to translate and cross-culturally adapt an existing instrument to the target population and test its usefulness for that specific population (Hilton & Strutkowiski, 2002; Beaton et al., 2000; Hunt, 1999). These issues become even more important for the conduction of cross-cultural, multicentric, randomized clinical trials to achieve the minimal requirements, which becomes more difficult according to the number of involved countries and cultures (Hilton & Strutkowiski, 2002; Hunt, 1999).

Translation

Various methodologies are employed for cross-culturally adaptations of PRO and QoL instruments, which prevent possible comparisons between the measures. There are different terminologies used to refer to the same aspects of the translation process, which are not clear. In addition, some instrument developers have sometimes developed their own translation guidelines for use with a specific instrument, which may be inconsistent and/or out of date, compared to current research requirements. As a consequence, poorly translated instruments threaten the validity of research data and the safe aggregation of global data sets (Wild et al., 2005).

The most commonly used type of translation follows the recommendations of Guillemin, Bombardier and Beaton (1993) and Beaton et al. (2000). The translation process includes the initial translation, the synthesis of the translated version, the back translation, the expert committee review, the technical proof of the final version, and the subsequent psychometric evaluation.

According to Beaton et al. (2000), the translation process should follow six stages. Firstly, it is recommend that at least two forward translations from the original language to the target one

be carried out by two independent bilingual translators, whose native tongue is the target language. The second stage is devoted to the synthesis of the two translations. During this stage, the two translations are compared and discrepancies related to ambiguous wording in the original version or to the translation process are screened. The translators may solve any wording discrepancies, challenging phrases, or uncertainties. Thus, only one version derived from the two translations is generated. In the third stage, back translation of this version to the original one is carried out by two blinded bilingual translators, whose native language is the original language of the instrument. The back translation is necessary to assure that the translated version reflects the same item content of the original version. This process yields two back-translated versions, to assure a consistent translation and highlight gross inconsistencies or conceptual errors. It is recommended that the two translators should not be aware or informed of the explored concepts and, preferably, have no medical background. Stage 4 requires the establishment of an expert committee for the evaluation of cross-cultural equivalence. The expert committee composition may vary, but it is recommended that it should be comprised of methodologists, health professionals, language professionals, and all of the translators involved in the translation and back-translation processes. The role of this committee is to consolidate all the versions, review the translations, reach consensus on any discrepancies, and, therefore, develop what would be considered the pre-final version for field testing. Stage five is related to the test of the pre-final version, to verify how it compares, when applied in subjects or patients from the target population and settings. Beaton et al. (2000) recommended that a sample of 30–40 persons is necessary for this phase. Both the meaning of the items and responses would be explored to ensure that the adapted version still retains its equivalence in an applied situation. This testing situation does not assure that the instrument has the same psychometric properties of the original version. To some extent, it provides some measures of the quality of the ▶ content validity. Additionally, testing for the retention of the psychometric properties is carried out. Finally, a field testing is carried out in stage six, and a report with all documentation should be sent to the developers of the original version of the instrument.

This process is the most widely used and has been used in numerous studies, which have adapted several instruments from English versions to different languages and cultures (Moura, Silva, Navarro, Britto, & Dias, 2011; Mitre et al., 2008; Camargos et al., 2010; Teixeira-Salmela, Magalhães, Souza, Lima, Renata Cristina Magalhães Lima, & Goulart, 2004; Ferreira, 2000; Ciconelli, Ferraz, Santos, Meinão, & Quaresma, 1999). Good examples are the MOS-Short-Form-36 health survey and the Nottingham Health Profile, both widely used worldly generic instruments to assess QoL, whose Brazilian (Teixeira-Salmela et al., 2004; Ciconelli et al., 1999) and Portuguese versions (Ferreira, 2000), among others, have been cross-culturally translated and tested, following the methods recommended by Beaton et al. (2000).

According to Wild et al. (2005), the differing methodologies, terminologies, and instrument developers' guidelines may pose unclarity and inconsistency in the cross-cultural adaptation processes. As a consequence, poorly translated instruments threaten the validity of research data and the safe aggregation of global data sets. There is no practical means to assess the validity and conceptual equivalence of new or existing translations, except by post hoc psychometric validations. Quality assurance is, therefore, heavily dependent upon the employed methodology. This criticism was addressed during a consensus meeting of the International Society for Pharmacoeconomics and Outcomes Research and Quality of Life Special Interest Group. They proposed that to refine the translation process, a harmonization should be done by comparing the back translations in multiple language versions with each other and the original instrument to highlight discrepancies between the original and its derivative translations, as well as to achieve consistent approaches to the translation problems. In addition, in the technical testing, a cognitive debriefing also should be accomplished by testing the instrument on a small

group of relevant patients or lay people to test alternative wording and to verify understandability, interpretation, and cultural relevance aspects of the translation.

Equivalence

Beaton et al. (2000) recommended that, in addition to the back-translation process, the analyses of six types of equivalency in both cultures should be carried out. This recommendation is corroborated by Herdman, Fox-Rushby, and Badia (1998), who suggested the following strategies to assure equivalence of the translated version: conceptual equivalence (when both instruments have the same idea, which is shared by both the original and the target languages), equivalence of items (refers to the appropriateness of the elements of the original scale to represent the concept in questioning the target language), and semantic equivalence (to verify the transfer of meaning between the original and the target languages). This issue is extremely influenced by the levels of scholarity, suppose that poorly educated people had a limited vocabulary and different expressions than did highly educated persons. In some countries, even though there is an official language, people could be able to communicate in one or more other languages, which also can overwhelm the process of semantic equivalence. Operational equivalence refers to the possibility of using a similar format of the instrument, such as instructions, mode of administration, and assessment methods; measure equivalence intended to verify if the different versions can reach similar validity and reliability levels; and functional equivalence is reached when all types of equivalence are achieved. In this case, the instrument will also measure the concept in both the original and the target cultures, the results will be comparable, and the cross-cultural adaptation is established for the new version.

Choosing a Mode for Administering PRO Measures and QoL Questionnaires

There are various ways in which PRO and QoL questionnaire data can be collected and scored, including self-interviewer and computer administration. These options can be used either for data collection inside or outside of clinical contexts. If data are collected inside clinical settings, patients require private space to complete the PRO. If data is collected outside, it is necessary to require personnel to manage the process, as well as for the nonautomated options, the data entry. Computers, including smart phones and handheld devices, are likely to be more commonly used for data collection in the future, given their increasing prevalence and many advantages, including directly integrating data in the electronic medical records and prompting automated alerts to clinicians for problematic symptoms which patients may be experiencing (Snyder et al., 2011).

Most QoL instruments are proposed to be self-administered, but this possibility should take into account that individuals should have enough schooling to be able to understand and interpret what is read; otherwise, the reliability of the answers is certainly compromised (Osoba, 1999). In the case of most developing countries, where the prevalence of people with low educational levels is high, reading and understanding the items of a questionnaire is unlikely to be successful. Therefore, it is recommended that the mode of administration of PRO measures or questionnaires be done by interviews (Moura et al., 2011; Mitre et al., 2008; Camargos et al., 2010; Teixeira-Salmela et al., 2004; Ciconelli et al., 1999). For this procedure to be reliable, the examiners need to be properly trained for the interview applications to minimize personal interpretations of the subjects's responses or even induce their responses. It is also recommended that in clinical research studies, the interview should be blinded to the type of intervention or group allocation (Maher et al., 2007; Osoba, 1999). Another possible mode of administration includes assisted application, when the subjects have good levels of scholarity but are unable to independently handle the instrument, and telephone interviews, which are feasible only for certain types of instruments and socially privileged population groups (Osoba, 1999).

Conclusions

PRO outcome measures and QoL questionnaires are widely used by health professional around the

world for measuring patients' health status or treatment outcomes. However, most of those measures were developed in the English language; therefore, translation and cross-cultural adaptation procedures are required to employ those instruments in non-English-speaking and various cultural contexts. It is important to stimulate these processes instead of developing a new measure, which is time-consuming and costly. Furthermore, adaptation of a questionnaire allows data collection efforts to be the same in cross-national studies. These issues become even more important, when considering the development of cross-cultural, multicentric, randomized clinical trials. The cross-cultural adaptation of PRO measures or questionnaires comprises at least six stages, as follows: forward translations, synthesis of the translations, back translations, expert committees to harmonize the translated versions, pre-final version testing in pilot studies with the target population, and, additionally, testing for the retention of the psychometric properties. In parallel to the translation and adaptation processes, the conceptual, semantical, operational, measure equivalences of the instrument should be verified. After all of these operations, one is able to state that the instrument has functional equivalence, that is, the instrument is ready to be reliably used with the target population.

Cross-References

- ▶ Cross-Cultural Comparison
- ▶ Cross-Cultural Validation
- ▶ Cultural Values
- ▶ Translating Health Status Questionnaires/ Outcome Measures
- ▶ Translation Research

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Cross-Cultural Comparison

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Synonyms

Cross national comparison

Definition

Comparison of results obtained in different groups or countries.

Description

The purpose of comparative analysis is mostly to compare statistics like means and the strength of relationships across groups and suggest explanations for differences in these statistics. Most of the attention has been directed to the statistical analysis, with multilevel analysis (Snijders and Bosker 1999, Hox 2002) and multiple group analysis (Jöreskog, 1971) receiving a lot of attention. However, it is important to mention that comparative analysis is only possible when a number of strict requirements with respect to comparability of the approach in the different countries or groups are fulfilled.

In the ▶ questionnaire design, answering, and data manipulation, several errors can be made. Besides that, the sampling frame, the sampling (Groves 1989), the fieldwork (Billiet, Koch, & Philipens 2007), and data manipulation can also create errors (Biemer et al. 2011). It is clear that errors in all these steps cannot completely be avoided. This issue has been discussed under the heading of ▶ total survey error.

In cross-national research, one has to add some extra activities like the formulation of the questionnaire in different languages and coping with the different facilities for sampling in the different countries. It is important to realize that the results of the different groups and countries become incomparable if the sizes of the errors in the design steps of the research are different across countries.

Therefore, in some studies like the European Social Survey and ▶ PISA, a lot of attention is given to efforts to make the samples (Häder and Lynn 2007) and the questionnaires (Harkness 2003, 2007) in the different countries as comparable as possible. While the situation in the different countries may be very different with respect to the data about the population, it is important to develop a procedure which makes the samples in the different countries as representative as possible for the different countries.

It is also important to take care that the translation is done in such a way that the questionnaires are functionally equivalent. This does not mean that literally translation is necessary but that the interpretation of the questions is invariant across countries (Harkness 2007). Procedures have been developed to test this requirement. They are called configural invariance, metric invariance, and scalar invariance. Configural and metric invariance are needed for comparing relationships across groups, while comparing means requires also scalar invariance. For the details of these procedures, we refer to the literature (Meredith 1993, Steenkamp and Baumgartner 1998; Millsap and Meredith 2007; Saris and Gallhofer 2007).

Cross-References

▶ Comparative Analysis

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Cross-Cultural Validation

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Definition

Cross-cultural validation refers to whether measures (in most cases psychological constructs) that were originally generated in a single culture are applicable, meaningful, and thus equivalent in another culture (Matsumoto, 2003). It has been mainly applied in psychological studies which need to adapt self-reported health status measures for use in languages other than the source language (Beaton, Bombardier, Guillemin, & Ferraz, 2000).

Description

Most published measures of health status have been originally developed for, and validated in, English-speaking populations. With the increased number of multinational and multicultural studies, the need to adapt these measures for use in other languages has become more widespread (Beaton et al., 2000). However, it is challenging to adapt an instrument in a culturally relevant and comprehensible form while maintaining the meaning of the original items (Sperber, Devellis, & Boehlecke, 1994). If measures are to be used across cultures, countries, or languages, the adaptation process needs to follow a unique and rigorous method in order to ensure equivalence between the original and newly developed versions of the instruments (Beaton et al., 2000). This process is usually described as cross-cultural adaptation.

The process of the cross-cultural adaptation may vary according to the settings in which it occurs, as shown in (Beaton et al., 2000). As many existing quality of life-related measures (and their correlates) were developed for use in English-speaking populations and countries, the adaptation of these measures for use in non-English-speaking countries would need to take into account both linguistic and cultural issues. Even in countries where English is frequently used in addition to the native language and where bilingualism is common (e.g., India and Hong Kong), the language of the questionnaire may influence the participants' responses. An interesting study conducted among undergraduate students in 24 countries has suggested that the language of the instrument may affect the way people respond to questions related to cultural values (Harzing 2005). Respondents tend to subconsciously alter their answers to fit with the culture associated with the language in question. Therefore, when respondents from two or more language groups reply to a questionnaire in the same language, differences between these two groups will be smaller than if they were to reply to a questionnaire in different languages (Harzing 2005).

Flaherty et al. (1988) have proposed five major dimensions of a stepwise validation of new instruments for cross-cultural equivalence: (a) content equivalence, which assures that each

item or the instrument contains information relevant to the culture under investigation; (b) semantic equivalence, which ensures that items in the source language and target language have equivalent meanings; (c) technical equivalence, which involves the ability of a measure to achieve comparable results in two or more cultures; (d) criterion equivalence, which requires that interpretation of the measure remains the same when comparing two or more groups; and (e) conceptual equivalence, which indicates that the same theoretical construct is being measured in different cultures.

Cross-cultural validation studies are one of the four types of cross-cultural studies (Matsumoto, 2003). They examine the validity of a measure across cultures. These studies do not test a specific hypothesis about cultural differences per se; rather, they test the equivalence of self-report measures for use in other cross-cultural comparative research (Matsumoto, 2003). They serve an important purpose in investigating the cross-cultural applicability of many of the methodological techniques used in research and in establishing equivalence in measurement, which is a vital aspect of cross-cultural research.

Using the health-related quality of life (HRQOL) measure as an example, Guillemin et al. (1993) have proposed five-section guidelines to reach equivalence in cross-cultural adaptation (Table 1): (1) translations and (2) back-translations by qualified people, (3) committee review of those translations and back-translations, (4) pretesting for equivalence using adequate techniques (with bilingual or monolingual individuals), and (5) reexamination of the weighting of scores, if relevant.

Schaffer and Riordan (2003) conducted a review of cross-cultural methodologies in the realm of organizational research from 1995 to 2001 and found that back-translation has been frequently mentioned with no further comments on issues related to semantic equivalence. During the translation process, questionnaire items may become partially distorted due to a certain level of ambiguity in the meaning of either the original or translated version of the items in question (Schaffer & Riordan, 2003). To avoid such problems, the authors recommended back-translating the questionnaire before administering it to the target respondents who speak a different language from the one in which the questionnaire was originally developed and validated. They also recommend using translators who have experience with the setting where the research is going to take place (Schaffer & Riordan, 2003).

Cross-Cultural Validation, Table 1 Guidelines to preserve equivalence in cross-cultural adaptation of HRQOL measures

1.	Translation
	Produce several translations
	Use qualified translators
2.	Back-translation
	Produce as many back-translations as translations
	Use appropriate back-translators
3.	Committee review
	Constitute a committee to compare source and final versions
	Membership of the committee should be multidisciplinary
	Use structured techniques to resolve discrepancies
	Modify instructions or format, modify/reject inappropriate items, generate new items
	Ensure that the translation is fully comprehensible
	Verify cross-cultural equivalence of source and final versions
4.	Pre-testing
	Check for equivalence in source and final versions using a pretest technique
	Either use a probe technique or submit the source and final versions to bilingual lay people
	Immigrants: Choose the language of administration or use a dual-format measure
5.	Weighting of scores
	Consider adapting the weights of scores to the cultural context

Source: Guillemin et al. (1993) (http://www.sciencedirect.com/science/journal/08954356)

Several cross-cultural researchers have recommended using two statistical approaches, i.e., covariance structure analysis (aka structural equation modeling) and item response theory for assessing conceptual and scaling equivalence (Paunonen & Ashton, 1998; Schaffer & Riordan, 2003). Assessing measurement invariance prior to conducting cross-cultural research appears to be critical. However, it has been noted that the

repeatability of factorial structures across cultural groups may not provide adequate evidence of measurement invariance. Item response theory, and specifically the use of differential item functioning, allows for item-level comparison of responses between two different groups (e.g., a group completing the English version of the questionnaire and another group completing the translated version) using the same instrument. This method can assist the identification of items that function differently across different cultures (Eremenco, Cella, & Arnold, 2005).

In summary, research dealing with the cross-cultural adaptation of measures is becoming increasingly popular in many fields related to quality of life. Researchers have established rigorous methods for adapting instruments developed in a source language for use in cross-cultural research. Researchers should note that the above-mentioned criteria for cross-cultural equivalence apply to instruments that are identical in items or format. The process for evaluating and achieving cross-cultural equivalence between nonidentical instruments is even more complex and challenging (Flaherty et al., 1988).

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Crossed Random Effects Models

▶ Cross-Classified Hierarchical Linear Modeling

Cross-National Adaptation

▶ Cross-Cultural Adaptation

Cross-National Comparison(s)

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Synonyms

International comparison; Trans-national comparison

Definition

International comparative research is undertaken in all areas of social science, including ▶ social indicators and ▶ quality of life research. It makes sense to use a cross-national research strategy in situations in which many countries face the same issues

or problems, but have tackled them in different and, presumably, more or less successful ways.

Description

There are numerous valuable international compendia of social and economic indicators/quality of life indicators. The United Nations, the World Bank, the European Union and the Organisation for Economic Cooperation and Development (OECD), all have annual publications which update social and economic indicators for member countries. The *U.N.'s* ▶ *Human Development Index*, based on the ideas of the economist and Nobel Laureate, *Amartya Sen*, is perhaps the best known single measure of economic and ▶ social development. It gives equal weight to measures of educational attainment, ▶ health, and economic well-being.

Other notable international compendia, published by academics, are Richard J. Estes' *The Social Progress Of Nations* (1984) and Ruut Veenhoven's ▶ *World Database of Happiness* (2009). The former provides excellent coverage of so-called objective indicators of well-being. The latter is a superb collection of measures and empirical results relating to ▶ happiness and ▶ life satisfaction.

In general, international comparative research is most productive when researchers are able to evaluate different approaches or solutions to the similar problems faced by many countries. In general, as in experimental research, researchers seek (or should seek) to maximize variation in all reasonably plausible combinations of explanatory (or policy) variables (Hoffmeyer-Zlotnik & Wolf, 2003). However, Veenhoven's data can be interpreted as suggesting that the correlates and presumed causes of happiness do not differ – or differ little – from country to country (Veenhoven, 2009).

Cross-national comparisons of average levels of ▶ subjective well-being (SWB) in different countries are controversial. Some researchers, including Argyle (2001) and Kahneman (2005), find it simply incredible that low status people in English-speaking countries report higher levels of Subjective Well-Being (SWB) than low status people in other comparatively rich non-English-speaking countries, like France and Italy. These researchers believe that reported levels of SWB are influenced by cultural and linguistic conventions about how happy it is seen as appropriate to be. Veenhoven (1996), on the other hand, broadly endorses the validity of cross-national comparisons, pointing out that rich countries are generally happier than poor countries, and that linguistic and ethnic minorities in predominantly English-speaking countries (e.g., the French speakers in Canada) report similar levels of SWB to the majority population. His view is that if language and culture were significant determinants of reported SWB, then linguistic minorities would report average levels of SWB which differed from the majority in predictable ways.

Reports of SWB differences between countries are often presented without recourse to explanation or theory. Lynn (1982) suggested that in countries which were defeated or occupied in the Second World War, the populations subsequently manifested higher levels of ▶ anxiety and neuroticism than in countries which were victorious or neutral. However, this lead has rarely been followed. It is not really known whether apparent national differences in SWB are due to differences in average scores on personality traits like neuroticism and extroversion.

Cross-References

▶ Comparative Analysis
▶ Cross-Cultural Comparison

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Cultivating Life

▶ Chinese Medicine and Yang Sheng

Cultural Adaptation

▶ Cross-Cultural Adaptation

Cultural Amenities

▶ Cultural Capital

Cultural and Organizational Effects

▶ Higher Education: Institutional Effects

Cultural Aspects

▶ Cultural Capital

Cultural Bases of Emotion

▶ Emotions, Sociology of

Cultural Capital

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Synonyms

Cultural amenities; Cultural aspects

Definition

Beyond arts and heritage, cultural capital encompasses various elements to include "diverse traditions, values, place, and social history… The stock of cultural capital, both tangible and intangible, is what we inherit from past generations and what we will pass onto future generations. Overall, it leads to quality of life and better knowledge of ourselves" (Creative City Network of Canada 2008: 2).

Description

The following explanation of cultural capital is provided by Phillips and Gordon (2009): "Cultural capital is an increasingly popular topic both from perspectives of economic-oriented analysis and in the context of community-based applications exploring societal accumulation and its outcomes. With its ascendancy, conceptual ideas about cultural capital and perceptions of it are changing. Prior definitions focused on arts and heritage, but new understandings and applications are now continually evolving."

Cultural capital is distinct from, yet related to, economic capital, which briefly is defined as cash and other economic assets. It is important to recognize cultural capital's instrumental and intrinsic value and its role in development. The World Commission on Culture and Development has made this clear in their seminal report, *Our Creative*

Diversity, which strives to protect cultural assets and diversity from development patterns that limit or endanger cultural capital (World Commission on Culture and Diversity 1996:14). The need for development worldwide is clear and pressing, yet the need to avoid reducing "culture to a subsidiary position as a mere promoter of economic growth" is paramount. Further, UNESCO adopted the "Universal Declaration on Cultural Diversity" to bring attention to the vital dimensions of culture. In Article 3, they define cultural diversity as a factor of development:

> Cultural diversity widens the range of options open to everyone; it is one of the roots of development, understood not simply in terms of economic growth, but also as a means to achieve a more satisfactory intellectual, emotional, moral and spiritual existence. (UNESCO 2001: Article 3)

Cultural capital can be viewed from many different perspectives. From the sociological standpoint, Pierre Bourdieu's work is predominant, with his having coined the term cultural capital. From an economic perspective, see works of a major theorist in the area, David Throsby.

Cross-References

- ▶ City Culture Maps
- ▶ Community Capacity Building
- ▶ Cultural Goods and Services (Consumption of)
- ▶ Cultural Health Index

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Cultural Capital and Quality of Life in Korea

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Description

Cultural Capital and Quality of Life in Korea

Origins of Cultural Capital

What impact does the cultural experience have on the QOL (quality of life)? Since the remarkable work of Pierre Bourdieu, the concept of cultural capital has gained wide popularity along with theoretical and conceptual debates. Pierre Bourdieu (1986), a French sociologist, introduced the term "cultural capital" in his research relating to class and education. Bourdieu (1986) distinguished cultural capital from economic capital. The latter can be immediately and directly converted into monetary terms and easily institutionalized as the property right, whereas the former consists of three kinds of things including "an embodied state" – i.e., inherited and acquired properties in one's self – "objectified cultural goods," and "institutionalized cultural entitlement." Economic capital possesses materialistic and objective characteristics, so it is easily accumulated and swiftly transferable. Cultural capital, by contrast, is nonmaterialistic and subjective, thus difficult to accumulate and transfer.

Previous research has tried to convert the abstract concept of cultural capital into concrete definition for empirical studies. For example, Roberts (2004) defined cultural capital as participation in cultural activities – including leisure – and DiMaggio (1982) defined it as

participation in arts, music, and cultural events. DiMaggio and Mohr (1985) elaborated the concept as attitude, activity, and knowledge about lofty culture. In our study, cultural capital is defined as individuals' cultural experiences regarding eight kinds of art or culture including literature activities, paintings/exhibits, classic music concerts or opera performances, plays, dance performances, movies, and other types of music concerts or entertainment shows.

Bourdieu suggested cultural capital as a new concept based on his insight that the reproduction of social structure under capitalist societies cannot be fully understood only in terms of economic capital, which seemed foreign to traditional mainstream political economics. In modern societies, Bourdieu said, the reproduction of a capitalist class depends on not only economic capital but cultural capital, which has been previously dismissed. From the functionalist perspective, cultural capital, a by-product of superstructure to some extent, contributes to reproducing the production relation and also to determining or continuing the unequal structure in capitalist societies. Therefore, it is not an exaggeration to argue that the crystallized capitalist profit structure cannot be obtained only with economic capital without the proper role of cultural capital. Bourdieu argued that without the reproductive function of cultural capital, the formation of pure and completed bourgeois society is unthinkable. To confirm the role of cultural capital through concrete evidence, Bourdieu (1973) did empirical studies on the role of cultural capital in the education system.

Cultural Capital and QOL

Cultural factors have not been recently focused upon. Until now, just a few studies have focused on the role of cultural capital in QOL (Matarasso, 1997; Michalos, 2005). Cultural activities conspicuously influence one's life in two dimensions: social and individual dimensions. First, Jeannotte (2003), who has tried to find the usefulness of cultural activities in social dimensions, showed that cultural activities facilitate social participation. By carrying out a descriptive research on cultural activities, Matarasso (1997) showed that extensive involvement in artistic activities has a positive effect on social cohesion, community empowerment, self-determination, local images, identity, and so forth. Second, cultural activities have a positive effect on health at individual level. By survey data, Matarasso (1997) showed that, after having experiences in artistic activities, 52 % of respondents felt that they became healthier than before. Through literature review, Staricoff (2004) suggested that listening to music confers health benefits. Bygren, Konlaan and Johannsson (1996) argued that people active in cultural activities live longer than others. Third, along with these visible effects, artistic activities at the individual level have positive relationships with people's subjective thinking and feeling. Matarasso (1997) reported that artistic activities have a good influence on personal development, imagination, and vision building. In this study, 73 % of respondents became happier and got a lot of enjoyment through artistic activities. Through a case study, Coalter (2001) argued that visiting a museum directly facilitates self-respect, self-confidence, and subjective well-being. Moreover, Silverstein and Parker (2002) found in research that leisure activities (including cultural ones) contribute to positive consequences in people's subjective evaluation about their general life situation. Also, Bowling and Gabriel (2004) showed that social activities (including cultural ones) raise respondents' QOL.

Cultural Capital and QOL in Korea

Data and Sample

Based on data from Korea, we analyzed how cultural capital has impact on QOL. The population consists of males and females aged 15 years and older from 31 official cities and counties within Gyeonggi province. The survey was conducted from May 23, 2007, to June 13, 2007, and a structured questionnaire was administered to a sample of 6,300 households in face-to-face interviews. We received responses from 1,950 out of 6,300 contacted, and a response rate was 30.9 %.

We used a multistage stratified sampling method. At the first sampling stage, official areas were randomly selected from a pooled list of city and county, and the next step was to select households within cities and counties already chosen. At the final stage, respondents were sorted by date of birth and randomly selected.

In terms of measuring cultural capital, DiMaggio (1982) defined it as participation in arts, music, and cultural events. We also focused on cultural experiences of cultural capital. We subdivided the cultural experience variables into three conceptual components – frequency of, diversity of, and spending on cultural experiences with eight activities (literature activities, painting exhibits, classical music or opera performance, traditional art performance, plays, dance performances, movies, music concerts or entertainment shows).

First, "frequency of cultural experience" was measured by the number of cultural experiences which respondents had for eight cultural activities during the last 1 year. Second, "diversity of cultural experience" was measured by the number of different types of cultural activities which respondents were involved in during the previous year among the eight kinds of activities. Lastly, "spending" was measured by monthly average expenditure on cultural activities.

Although there are controversies over the components of subjective well-being, it is generally accepted that subjective well-being is composed of affective happiness and cognitive life satisfaction (Helliwell & Putnam, 2004). The former concerns affective attributes of short-term and contingent emotion, whereas the latter represents long-term and stable cognitive attributes.

For measuring QOL, first, life satisfaction was measured by asking the question: taking all things together, how much satisfied are you with your life in general? Life satisfaction was assessed on a four-point scale (1 = very dissatisfied, 2 = fairly dissatisfied, 3 = fairly satisfied, 4 = very satisfied). Second, happiness was measured by asking the question: taking all things together, would you say that you are happy these days? It was evaluated on a four-point scale (1 = very unhappy, 2 = not so happy, 3 = pretty happy, 4 = very happy).

Various Cultural Experiences and Life Satisfaction/Happiness

What effect do various cultural experiences have on life satisfaction and happiness? To answer this question, respondents were classified into two groups, "experienced" and "nonexperienced" with cultural activities. Two groups were compared to see differences in subjective well-being caused by the cultural divide as follows in Table 1.

With regard to the relationships between cultural experiences and general life satisfaction, the mean scores of life satisfaction, measured on four-point scales, are higher in the experienced group than in the nonexperienced group. The life satisfaction gap between two groups appears consistent regardless of the type of cultural activity, which proves the structural and persistent effect of the divide in cultural experience on the life satisfaction. Differences between the two groups are statistically significant in cases of experiencing arts exhibits, traditional arts performances, plays, and movies. Watching traditional arts performances was reported to give the highest satisfaction, with a mean of 3.07, while the entertainment shows were reported as the lowest, with a mean of 2.86. The satisfaction discrepancies between different kinds of activities confirm Staricoff's (2004) argument that the effect of the arts on the QOL varies according to the type of art. Figures in the last row of Table 1 show the difference in the means of the overall satisfaction level of the experienced and the nonexperienced. Also those results confirm the research by DiMaggio (2002) and Michalos and Kahlke (2008) that difference in all arts-related activities (treatment) do not bring out the same effects on QOL.

From overall mean score of life satisfaction at the last row, those who experienced none of the eight activities showed lower satisfaction (mean = 2.73) than the ones who had experienced them (mean = 2.87), even if the experienced had been involved in cultural activities just once.

Cultural Capital and Quality of Life in Korea, Table 1 Cultural experiences and subjective well-being

	Life satisfaction (mean)			Happiness (mean)		
	Non experienced	Experienced	F-value (p-value)	Non experienced	Experienced	F-value (p-value)
1. Literature activities	2.83	3.00	2.94(.086)	2.85	3.13	6.88(.009) **
2. Painting exhibits	2.82	2.91	3.95(.047)*	2.85	3.02	13.50(.000) **
3. Classical music or opera performance	2.82	2.92	2.60(.107)	2.85	3.04	10.26(.001) **
4. Traditional art performance	2.82	3.07	14.30(.000) **	2.85	3.07	10.63(.001) **
5. Plays	2.82	2.91	4.65(.031)*	2.85	2.96	7.97(.005) **
6. Dance performances	2.83	2.94	0.90(.344)	2.86	2.94	.48(.497)
7. Movies	2.73	2.87	35.24(.000) **	2.75	2.91	44.87(.000) **
8. Music concerts or entertainment shows	2.83	2.86	0.51(.477)	2.85	2.95	4.88(.027)*
Overall	2.73	2.87	32.95(.000) **	2.74	2.91	46.63(.000) **

*$p < 0.1$; **$p < 0.05$; ***$p < 0.01$

On the other hand, the happiness level of the experienced across all eight items was higher than that of the nonexperienced. Those enjoying literature activities recorded the highest happiness scores, whereas those watching movies showed the lowest. The final row of Table 1 shows that those who experienced more than one cultural activity expressed higher scores (mean = 2.91) than the nonexperienced (mean = 2.74) at the happiness level.

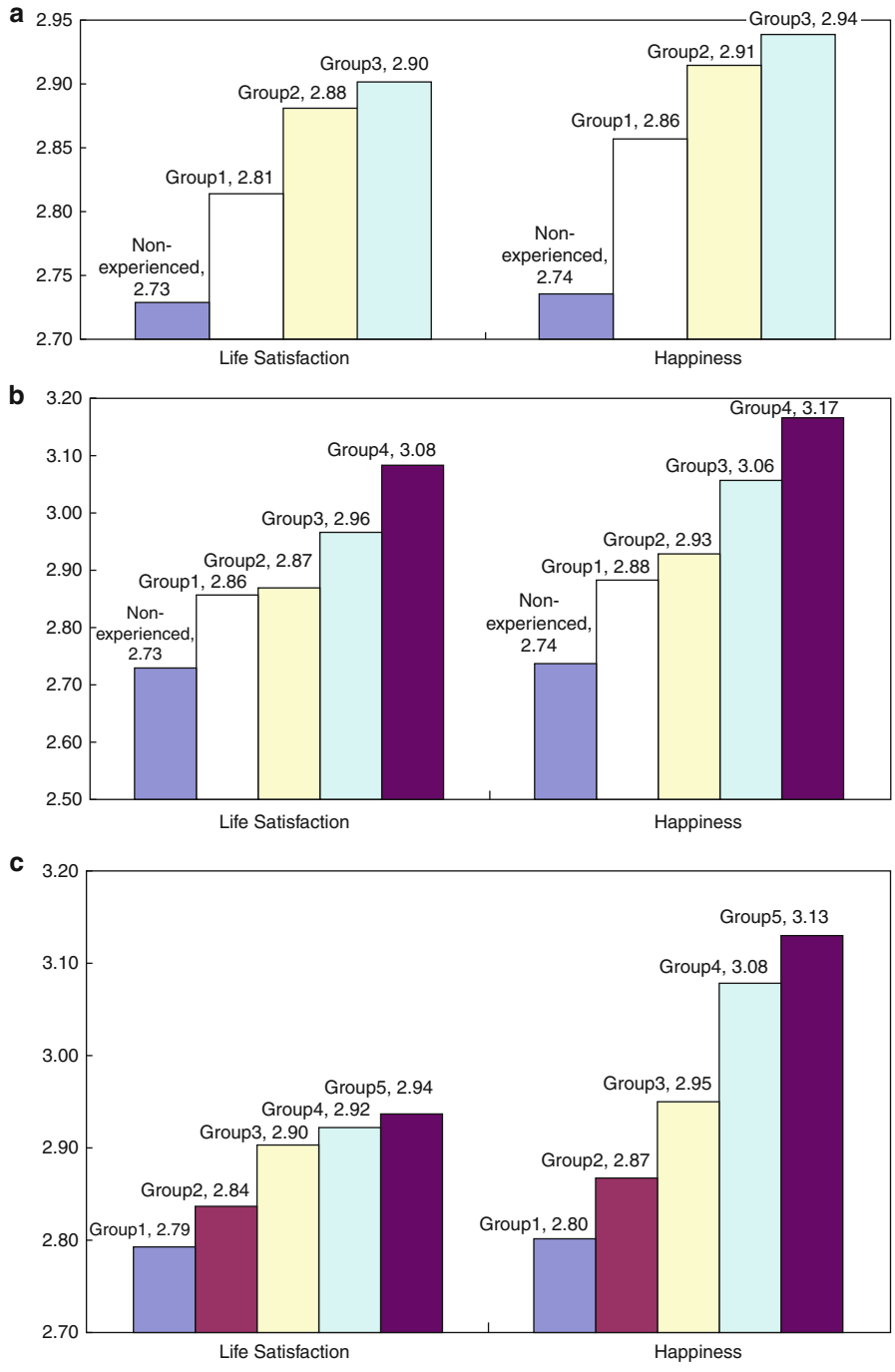
If we compare life satisfaction with happiness, Table 1 shows that life satisfaction always records lower scores than happiness, regardless of types of cultural activities. This can be understood that people tend to think they are happy rather than satisfied with their life, although other conditions are equal. Alternatively, this implies that cultural activities are more closely related to affective happiness than to cognitive life satisfaction.

Frequency, Diversity of, and Spending on Cultural Experience

To determine more attributive effects of cultural experiences on subjective well-being, we subdivide the cultural experience variables into three conceptual components – frequency of, diversity of, and spending on cultural experiences – and analyze the relationship between these three variables and subjective well-being.

The frequency variable reflects the quantitative attributes of cultural capital, whereas the diversity variable represents the qualitative features of the cultural experience. The spending on cultural activities is related to both quantitative and qualitative dimensions of cultural activities. If there are increases in frequency and diversity, it follows necessarily that expenditures grow.

First, we classified all respondents into four groups based on frequency to examine the level of subjective well-being according to the number of cultural experiences, which is shown in Fig. 1a. Respondents who had never experienced cultural activities were classified into the "nonexperienced group" (n = 568, 29.1 %). Those who had experienced them once or twice were included in "Group 1" (n = 398, 20.4 %); those who had experienced them three to five times were in "Group 2" (n = 504, 25.8 %); those who had experienced them over six times were in "Group 3" (n = 480, 24.6 %). Figure 1a showed that life satisfaction appeared to be



Cultural Capital and Quality of Life in Korea, Fig. 1 Cultural experiences and subjective well-being, (**a**) By frequency $F = 13.518$, $P < .000/F = 17.552$, $P < .000$, (**b**) By diversity $F = 13.518$, $P < .000/F = 17.552$, $P < .000$, (**c**) By spending $F = 13.518$, $P < .000 / F = 17.552$, $P < .000$

higher for those who had frequently experienced cultural activities than for those who rarely did. Similar patterns are also observed in happiness. It is noteworthy that as the frequency of experience goes up, life satisfaction or happiness also increases. Group 3, having experienced cultural activities over six times, showed the highest life satisfaction (mean = 2.90), followed by Group 2, Group 1, and nonexperienced group along with ordinal arrangements by frequencies. The pattern that more experience led to more satisfaction is also shown in the relationship of the frequency of cultural experience and happiness.

Second, Fig. 1b shows the variation of subjective well-being among five groups classified by degree of diversity of cultural experiences. "Nonexperienced" group in Fig. 1b was comprised of respondents having never experienced any of eight cultural activities. Respondents having experienced one type of activity were classified as "Group 1"; those having experienced two types of activities were classified as "Group 2"; those having experienced three types of activities were classified as "Group 3"; those having experienced no less than four types of activities were classified as "Group 4."

From Fig. 1b, we know that the more diverse experiences the groups had, the higher life satisfaction was shown. Whereas the life satisfaction was 2.73 in the nonexperienced group, the group that experienced over four types of activities reported the highest life satisfaction (mean = 3.08). A similar effect from diversified cultural experiences could be found in happiness as well. As groups had more varied cultural experiences, they appeared to be happier.

Third, Fig. 1c suggests the relationship between spending on cultural activities and subjective well-being. Since expenditure for cultural purposes tends to increase with more frequent and diverse cultural activities, it can be a proxy variable to reflect both the quantitative and qualitative dimension of cultural experiences. In this entry, five groups are identified according to the spending level as follows: below 10 thousand won ($10) classified into "Group 1," 10–50 thousand won ($10–50) into "Group 2," 50–100 thousand won ($50–100) into "Group 4"; 100–150 thousand won ($100–150) into "Group 4," and over 150 thousand won ($150) in "Group 5." As given in Fig. 1c, groups that spent more on cultural activities expressed much more life satisfaction and happiness than groups that spent less did.

The overall tendency suggested from Fig. 1a–c is that any group's happiness score is always higher than its life satisfaction score. This implies two possible interpretations: on the one hand, cultural experiences are more closely related to happiness rather than life satisfaction. On the other hand, people are naturally liable to be oriented to happiness irrespective of cultural experiences.

Determining of Cultural Role in QOL

Multiple regressions were performed to assess the relative effect of cultural experiences on subjective well-being when other variables were controlled. The model was comprised of dependent variables, including life satisfaction and happiness, and independent ones, including demographic and other influential factors such as social relations and health. Through separately adding three variables of cultural experiences as independent variables to each model, we can judge their significance and contribution to building each model. The results of the regression analysis are given in Table 2.

Regarding life satisfaction, across Model 1, Model 2, and Model 3, income, education, health, and social relations appear significant in explaining life satisfaction. Beta coefficients indicate that social relations explain the larger variance of dependent variables, followed by education, health, and income. Out of three cultural variables, only frequency has a significant effect on life satisfaction. Moreover, the beta coefficient of frequency recorded 0.045, the least among independent variables.

With regard to happiness, the significant independent variables are education, health, social relations, and cultural experiences. Compared to life satisfaction models, all coefficients in the happiness model were revealed as significant. Judging by beta coefficients, the relative explaining power was followed by, in sequence, social relations, education, health, and cultural

Cultural Capital and Quality of Life in Korea, Table 2 Multiple regression analysis of cultural experiences

Dependent variables	Life satisfaction model						Happiness model					
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
Independent variables	B(S.E.)	Beta	B(S.E.)	Beta	B(S.E.)	Beta	B(S.E.)	Beta	B(S.E.)	Beta	B(S.E.)	Beta
constant	1.540(.102)		1.547(.102)		1.547(.102)		1.561(.104)		1.579(.104)		1.546(.105)	
Gender	.025(.021)	.025	.024(.021)	.024	.028(.021)	.028	.058(.022)	.057	.053(.022)	.053	.060(.022)	.060
Age	.010(.010)	.026	.007(.009)	.017	.003(.009)	.007	.013(.010)	.033	.011(.009)	.027	.004(.009)	.010
Income	.026(.011)**	.053	.026(.011)**	.055	.029(.011)**	.060	.006(.012)	.013	.005(.012)	.010	.011(.011)	.022
Education	.085(.018)***	.117	.085(.018)***	.117	.091(.018)***	.125	.081(.018)***	.109	.078(.018)***	.105	.082(.018)***	.110
Health	.032(.009)***	.089	.032(.009)***	.089	.032(.009)***	.090	.030(.009)***	.081	.029(.009)***	.079	.030(.009)***	.082
Social relations	.087(.009)***	.224	.088(.009)***	.226	.089(.009)***	.229	.091(.010)***	.228	.091(.010)***	.228	.091(.010)***	.228
Cultural experiences	.005(.003)**	.045	.019(.013)	.035	−.006(.013)	−.011	.009(.003)***	.080	.053(.013)***	.094	.033(.013)**	.057
	Frequency		Diversity		Spending		Frequency		Diversity		Spending	
F-value	39.034***		38.844***		38.536***		37.137***		37.993***		36.521***	
R^2	.123		.123		.122		.118		.120		.116	

*$p < 0.1$; **$p < 0.05$; ***$p < 0.01$

experiences in Model 4 and Model 6, and by social relations, education, cultural experiences, and health in Model 5. In Model 5, where happiness is more influenced by the diversity of cultural experiences than by health, it implies that cultural factors could be superior to basic components of life such as health factors.

Moreover, if we compare the life satisfaction model with the happiness model, income variables in the former model are statistically significant, but are not in the latter model, which suggests that income has more association with cognitive factors, such as life satisfaction, not with affective factors such as happiness. Moreover, since all the cultural experience variables are significant in the latter model whereas just one is significant in the former model, this argues that the cultural experience is more closely connected with happiness than life satisfaction.

In short, regression analysis gives us the confidence that cultural experiences have a structural relation with an effect on happiness. However, their explanatory power is smaller than those of health or social relation factors: those results confirm previous researches that artistic activities possess less power to influence life satisfaction compared with social relations and health factors (Michalos, 2005; Michalos & Zumbo, 2000).

Conclusion

Since a focus on cultural capital is in fashion these days, our study explores how it affects subjective well-being. By analyzing the survey data, we come to the following conclusions:

First, regarding life satisfaction and happiness, there are differences to some extent between culturally experienced and culturally nonexperienced groups. The former reveals higher life satisfaction and happiness than the latter. Also we know that the kinds of cultural activities, not just the experiences themselves, also affect the QOL. Those imply that the contents of experience play a greater part in enhancing the QOL.

Second, we specified cultural capital in terms of frequency, diversity, and spending. Our data showed that the three factors intertwined with subjective well-being. Those who had more frequent and more diverse cultural experiences and spent more money for them showed more life satisfaction and happiness than those with fewer, less diverse experiences. Correlation coefficients show that the frequency of cultural activities had a strong relation to life satisfaction, whereas the diversity of cultural experience had a strong relation to happiness. This suggests that qualitative diversity of cultural experiences, not only quantitative frequency, should be increased to enhance the affective happiness.

Third, by regressing life satisfaction and happiness on the cultural factors and other rival factors including sex, income, education level, health, and social relations, we conclude that even though cultural factors show less explanatory power than other rival factors, they are statistically significant. In particular, the diversity of cultural experiences explains the variance as much as health factors. Moreover, cultural experiences heavily impact on the satisfaction regarding health and social relations, which are known as the first determinants of subjective well-being. All those facts illuminated the structural and comprehensive roles of cultural capital in QOL.

In short, the data showed that cultural divides influence, directly or indirectly, the QOL. This conclusion provides the policy implication. Since the cultural divide between people determines their degree of subjective well-being, it legitimizes policymakers' investment in cultural infrastructure and facilities. However, in the course of those investments, because our empirical findings suggest that qualitative diversity is important as much as quantitative frequency of cultural experiences, policymakers must pay attention to the qualitative side of cultural infrastructure, not only the quantitative side.

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Cultural Consensus

▶ Cultural Consonance and Psychological Well-Being

Cultural Consonance and Psychological Well-Being

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Synonyms

Cultural consensus; Lifestyle incongruity

Definition

Cultural consonance refers to the degree to which individuals approximate widely shared cultural models in their own beliefs and behaviors. Individual measures of cultural consonance are constructed by assessing the shared models of behavior in a given cultural dimension through cultural consensus analysis (Romney, Weller, & Batchelder, 1986; D'Andrade, 1995). One of the standard measures of cultural consonance, the one used in this research, refers to cultural consonance in material lifestyle, i.e., agreement in a list of material and nonmaterial items associated with a ▶ good life.

We proxied the ▶ psychological well-being of an individual by using information on self-reported frequency of four common emotions: ▶ anger, fear, sadness, and ▶ happiness. We also use information on self-reported ▶ consumption of four selected potentially

addictive substances as indicators of ▶ stress behavior (Sinha, Fuse, Renee-Aubin, & O'Malley, 2000).

Description

Researchers have hypothesized that the degree to which an individual's actual behavior approximates the culturally valued lifestyle encoded in the dominant cultural model—or cultural consonance in lifestyle—has consequences for physical and mental health (Pavot & Diener, 1993; Dressler & Bindon, 2000; Janes, 1990). The presumed mechanism linking cultural consonance to ▶ health is the social stress process (Pearlin, Menaghan, Lieberman, & Mullan, 1981). In other words, living a life at odds with widely shared understandings of how one ought to live (low cultural consonance) is a chronically stressful experience (Dressler, 2008; Dressler & Bindon, 2000; McDade, 2002; Dressler, Balieiro, & dos Santos, 2007a, b).

Although suggestive, findings from previous research are limited because they rely on cross-sectional data to test the above assumptions. The use of cross-sectional data does not allow one to parse out the effects of, for instance, individual personality traits, role models, or genetic makeup, thus biasing the estimations on the effects of adherence to cultural models and psychological health.

We estimate the association between a standard measure of individual achievement of the cultural model (i.e., cultural consonance in material lifestyle) and (a) four indicators of psychological well-being (sadness, anger, fear, and happiness) and (b) consumption of four potentially addictive substances (▶ Alcohol, Cigarettes, coca leaves, and home-brewed beer) as indicators of stress behavior.

Hypotheses

We test two hypotheses that derive from prior results found on cross-sectional research analyzing the association between cultural consensus and psychological well-being.

H1: Cultural consonance in material lifestyle will show a negative association with indicators of psychological ▶ distress (anger, sadness, and fear) and a positive association with a positive emotion (happiness).

H2: Cultural consonance in material lifestyle will show a negative association with consumption of addictive substances.

Methods

We draw on data from a panel study (2002–2006). The study collects data annually during June–September from all adults (n = 791) in 13 villages. Data were collected among the Tsimané, a society of foragers-farmers in Bolivian Amazonia, with the help of Tsimané translators and through interviews lasting about 1 h per adult.

The sample for the data presented here contains 399 females and 392 males over the age of 16, with complete data on all variables for at least two survey years.

For the explanatory variables, we took four steps to construct an individual measure of cultural consonance in lifestyle:

(a) *Cultural definition of lifestyle*. We used free listings to elicit a range of items that the Tsimané associate with a ▶ good life. We asked individuals to list "things or events that make a good life," and then we calculated the importance of each reason across all of the lists using the Saliency Index (Bernard, 1995).

(b) *Evaluation of the shared cultural model* (first year of the study). For this, we used rankings to evaluate the existence of a shared cultural model for Tsimané lifestyle (Dressler & Bindon, 2000). We asked informants to rate 14 items on a scale of "not important at all" (coded 1), "a little important" (2), or "very important (3)." Specifically, for each item on the list, we asked informants: "How important is X for Tsimané lifestyle?" The list of 14 items included seven material goods (that captured wealth differences between individuals as well as differences between men and women) and the seven most salient reasons from free listings on Tsimané lifestyle.

To test whether there was cultural consensus regarding the importance of these 14 items in the definition of Tsimané material

lifestyle, we used the formal consensus model in the software ANTHROPAC 4.02. We used the cultural competence score of the individuals (or the factor loading of each informant on the first factor, a measure of how strongly each individual's knowledge is correlated with the composite knowledge of the group) to calculate a weighted average of the ratings for each of the 14 items in our list. This analysis gives more weight to informants who showed more agreement with the culturally correct answer.

(c) *Behavior occurrence* (this measure was taken annually). We asked informants the occurrence of behaviors and the ownership of items in the rated list. Survey questions referred to respondent's asset ownership and reported behaviors during the week prior to the interview. We asked respondents, for instance: "During the last 7 days, have you spent time with your close family?" We coded survey questions as binary variables, with one indicating behavior presence or item ownership and zero indicating its absence.

(d) *Cultural consonance* (between the shared cultural model and the annual behavior occurrence). For this, we constructed a measure of cultural consonance for each individual and year by combining the ratings for each of the 14 items on our list and the behavior occurrence measures. Specifically, for each year, we multiplied the cultural saliency of each item by the binary variables measuring behavior occurrence. We than added the results to obtain an individual measure of cultural consonance for each year of the survey. Responses result in a quantitative assessment of cultural consonance at the individual level, with higher values indicating higher cultural consonance.

Outcome and Control Variables

For the outcome variables, we measured psychological well-being through self-report of (a) the selected positive and negative emotions and (b) consumption of potentially addictive substances during the 7 days prior to the day of the interview. Control variables included personal-, household-, village-, and year-level variables. Personal-level variables included age, sex, ▶ education, and body mass index (BMI). Control variables at the household level included household ▶ wealth, income, and size. The village-level control variable refers to the village's proximity to a market town.

Estimation Strategy

We estimated the association between cultural consonance in material lifestyle (explanatory variable) and our eight outcome variables using multivariate analysis. Since our outcomes are binary variables, for the empirical estimation, we used conditional individual fixed-effect logistic regressions with clustering by person. We also ran regressions with a full set of dummies to control for village attributes (such as proximity to market towns) that remained fixed during the period of research.

Because we used panel data, we were able to control for the potential confounding effect of fixed attributes that might affect both adherence to the cultural model and health outcomes.

Caveats

There are at least two caveats that merit attention. First, our estimations might be affected by omitted variable bias. It is possible that unmeasured factors equally affect both cultural consonance and the outcomes, but that there is no causal association between the two, and thus any relation potentially found is spurious. While we have included in our model variables that previous research suggests affect psychological well-being, we cannot rule out the possibility that there are other covariates not included in our model. Secondly, we assume that cultural domains do not change over short periods of time, so we measured the shared cultural model only once. But if cultural models had changed between the beginning and the end of the

panel study, our estimations might be biased in an unknown direction due to timing of the collection of different data over the course of the study.

Results

The average participant had a cultural consonance of 9.48 (SD = 3.87, min = 1.6, max = 22.93), with a high ($r \leq 0.5$) and statistically significant correlation ($p < 0.0001$) between measures of cultural consonance of the same individual taken in different years. Hence, the analysis of our measure of cultural consonance suggests that the measure displays a large variation across subjects but consistency for measures of the same subject across years.

Descriptive statistics of self-reported occurrence of emotions suggests that negative emotions were less common than positive emotions measured. As hypothesized, we found a negative association between cultural consonance in material lifestyle and the presence of three negative emotions (anger, sadness, and fear) (statistically significant at the 99 % confidence interval—$p < 0.01$–for all three emotions), while the association between cultural consonance and self-reported occurrence of a positive emotion, happiness, was positive (significant at the 95 % interval of confidence; $p < 0.05$).

Of the four variables analyzed for information on the consumption of potentially addictive substances, only the consumption of commercial alcohol shows the expected negative association with cultural consonance in material lifestyle. In addition, contrary to what we had hypothesized, the consumption of a traditional alcoholic beverage, *chicha*, bears a positive association with cultural consonance in Tsimané material lifestyle.

Discussion

The fact that the only the consumption of commercial alcohol bears the expected negative association with cultural consonance in material lifestyle is probably due to the fact that the other substances analyzed here (commercial cigarettes, coca leaves, and home-brewed beer) have cultural values attached. Ethnographic information suggests that Tsimané attach different cultural values to the consumption of those substances. For example, results from the free listings show that consumption of home-brewed beer is important in Tsimané lifestyle. Tsimané drink home-brewed beer probably not because they are sad, depressed, or stressed but, rather, because it is a culturally appropriated behavior and a major social event in Tsimané life. This would explain the positive association found between cultural consonance and drinking home-brewed beer. For the other substances, Tsimané have traditionally consumed tobacco for medicinal and religious purposes and have learned to chew coca from highland colonists, who also attach cultural values to coca chewing.

We found that those Tsimané whose actual behavior does not approximate the culturally valued lifestyle encoded in the dominant cultural model are more likely to consume commercial alcohol than those Tsimané whose behavior approximate cultural consonance in Tsimané lifestyle. These results suggest that it is the stress associated with the inability to conform to the dominant lifestyle that is associated with higher alcohol consumption.

In sum, as hypothesized, we found a negative association between cultural consonance in material lifestyle and psychological distress and a positive association between cultural consonance in material lifestyle and psychological well-being. The magnitude of the association was higher for negative than for positive emotions, but significant in statistical and real terms in both cases. This finding meshes with findings from previous research on the association between adherence to the dominant cultural model and psychophysiological outcomes. However, results presented here move research on the association between cultural consonance and psychological well-being one step further.

Previous research on the topic was based on the analysis of cross-sectional data, leaving open the possibility that fixed attributes of an individual explain both cultural consonance and outcomes. If the occurrence of emotions is stable over time, there would be no association between

cultural consonance and emotions once we control for fixed attributes of the individual. From previous research in the area during the same period of time, we know that the incidence of self-reported anger and fear declined during the study period (Godoy et al., 2009). Results presented here move research on the association between cultural consonance and psychological well-being one step further because they suggest that the variation in the occurrence of emotions is associated with success in reaching the shared cultural model even *after* controlling for fixed attributes of the individuals.

Another important point to highlight is that while previous research on the topic has been based on measures of blood pressure, we use self-reported information. From the three negative emotions measured, we found that anger had the largest association with cultural consonance in real terms. Since the experience of anger increases blood pressure more than the experience of other negative emotions, our results seem to fit well with previous findings. However, since self-reported health measures are less reliable than objective health measures, further research should obtain panel data on measures of cultural consonance and blood pressure, to obtain estimates more reliable than those offered here.

This work contributes to research on psychological ► health disparities by showing that a locally defined and culturally specific measure of cultural consonance on lifestyle is significantly associated with psychological health. The findings have important implications for researchers studying the well-being of indigenous peoples, as it demonstrates the importance of culture-specific values associated with certain behavioral occurrences and how these in turn relate to cultural consonance and psychological well-being.

Cross-References

► Cultural Diversity
► Cultural Values
► Indigenous Health Disparities
► Indigenous Knowledge

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Cultural Development

► UNESCO World Culture Report

Cultural Diversity

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Synonyms

Fractionalization of cultures; Heterogeneity; Pluralism

Definition

According to UNESCO, culture is "a set of distinctive spiritual, material, intellectual and emotional features of society or a social group. . .lifestyles, ways of living together, value systems, traditions and beliefs" (see http://www.unesco.org/new/en/culture/). In turn, cultural diversity reflects a plurality of knowledge, practice, and expression in the context of mutual respect. Cultural diversity does not assume harmony; it could also reflect fractionalization along lines of ethnicity, language, and religion.

Description

Recurring themes in the literature on cultural diversity include ▶ immigration, globalization, ▶ tolerance, social capital (Putnam, 2007), ▶ governance, provision of public goods (La Ferrara, 2003; Luttmer, 2001), and economic performance in city regions (Florida, 2002; Ottaviano & Peri, 2006) or workplace settings (Herring, 2009; Thomas, 1999).

In the context of quality of life, cultural diversity includes a bundle of indicators that are intended to measure well-being in a more holistic manner than traditional tools such as gross domestic product (GDP) or ▶ economic growth. However, most published articles that discuss the impact of cultural diversity or other forms of diversity on society do not use a holistic approach; rather they look at traditional economic indicators. Exceptions are Michalos and Zumbo (2001), Mohanty (2009), and quality of life studies such as those in New Zealand (see http://www.bigcities.govt.nz). Other studies go beyond economic indicators to include social capital characteristics such as ▶ civic engagement, ▶ volunteering (Costa & Kahn, 2003), and indices of ▶ trust (Alesina & La Ferrara, 2005; Putnam, 2007).

Cultural diversity exists in tension with other related measurements of diversity. Researchers interested in the effects of diversity on populations typically study differences in ethnicity, race, socioeconomic class, age, sex, immigration status, ▶ sexual identity, ▶ religion, and language. These types of differences, when clustered as a group of indicators, correlate with cultural diversity, whereas, on their own, as strictly independent categories, they are indicators of diversity. The issue of measurement is discussed in Bossert, D'Ambroiso and La Ferrara (2008): they provide a model by which multiple indicators combine to create a measurement of cultural diversity called "a generalized index of fractionalization." Keefer and Knack (2002) offer a measurement of the intensity of diversity, which they refer to as polarization. Arcand, Guillaumont, and Guillaumont-Jeanneney (2000) discuss how to differentiate fractionalization and polarization as concepts informing cultural diversity.

A universal effect of cultural diversity on quality of life should not be assumed or expected. It matters which cultures are mixing, what the political situation is, the geography and the nature of the historic interaction among different cultures. Modest generalizations have been made by Putnam (2007) and by Collier (2000). Collier reports that, in a survey of 94 countries between 1960 and 1990, "diversity is highly damaging to growth in the context of limited political rights, but is not damaging to democracies" (225).

Cross-References

▶ Immigrants, an Overview
▶ Multiculturalism

▶ Social Indicators
▶ UNESCO World Culture Report

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Cultural Evaluation

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Definition

Cultural evaluation denotes the assessment of a culture's performance according to a potentially infinite range of rubrics. The term does not denote inherently reliance upon perfectionist or good-based criteria and may be grounded in deontological conditions of rights and justice. It may often be associated with assessment across or between cultures.

Description

The evaluation of cultures has a long, ubiquitous history in practice and an embryonic presence as an academic pursuit. Humans have, from the earliest of times, evaluated cultures, particularly those of other groups. In *Germania*, for example, Tacitus produced a comparative and normative analysis of the cultures of Germanic and Roman peoples, ascribing differences in part to environmental factors as well as moral failings in Rome itself (see Chapters 35 and 44 of Germania). In the broadest of senses, monotheistic faiths evaluate the cultures of others according to their adherence to articles of faith, while Marx's view of progress as the development of the capacity for the satisfaction of need led him to appraise Western capitalism and criticize the "stagnation" of India (Avineri, 1969, pp. 93–94). In general, the various incarnations of Enlightenment thought, with their foundationalist appeal to notions of universality and objectivity, articulate different conceptions of cultural evaluation, assessing cultures according to such criteria as their contribution to human well-being, reason, and respect for persons. Given that these evaluations have often favored Western societies, the practice of evaluating cultures is necessarily controversial.

Conflicts, conquests, subjugations, persecutions, murder, and deleterious, paternalistic interventions, such as those by the British and Australian authorities in Aboriginal Australian communities, have all been motivated by explicit or implicit forms of cultural evaluation.

Intellectually, a number of approaches, particularly within anthropology, have arisen directly to challenge such judgments, arguing that "'native' ways [are] not necessarily inferior and that 'universal' or 'natural' concepts [are] anything but" (Johnson, 2011, pp. 278). These divergent approaches have often been crudely banded together under the banner of "relativism." Relativism, in its purest form, denotes belief in the irreducible subjectivity of human experience, employing social constructivism epistemologically and methodologically. At base, there is belief that symbolism, actions, and language are utilized, not to represent objects, but to explain and give meaning to life within the "moral space" of each human group (Hastrup, 1995, p. 11). The feelings of bemusement and/or superiority felt, for example, by Enlightenment thinkers engaging in ▶ cross-cultural comparison when confronted by the "backwardness" of non-Western/non-modern societies resulted not from recognition of an objective cultural deficit but, rather, from the transcendence of moral spaces and the discovery that the observed culture had failed to construct similar moral categories (See Lévi-Strauss, 1992, pp. 7–8, 28). Enlightenment philosophy, critics argue, has made the error of assuming "equivalence of human nature and his own cultural standards" (Benedict, 1989, p. 6). The claim, here, is that there are simply no objective, universal criteria by which to evaluate meaningfully across or between cultures. Methodologically, therefore, "Other minds, other cultures, other languages and other theoretical schemes call for understanding from within. Seen from within, they make us doubt whether there is anything universal under the sun" (Hollis & Lukes, 1982, p. 1).

Upon this analytical foundation rest a number of contradictory positions, two of which are relevant here. The first approach shares many of the central corollaries of skepticism in asserting "the view that nothing is really [objectively] either right or wrong, or that there are no moral principles with a reasonable claim to legitimacy" (Hatch 1983, p. 369). All moral or evaluative claims are relative to the particular moral space in which they develop. They are thoroughly intersubjective, being derived from the interaction of subjective beings. Judgments can be made but must be understood as being grounded in foundationless language games. This is evident, for example, in Richard Rorty's (1991, pp. 13–14) pragmatic defense of human rights. One logical conclusion of anti-foundational positions on the possibility and nature of evaluation is that while there is nothing objectively good or right about the use of systems of cultural evaluation, there is also nothing objectively bad or wrong either. This tenet suggests that, not only are there no enduring interests, there is also no objective reason to grant value to interests once they are culturally constructed.

The second position might best be described as culturalist, holding that as cultural constitution is essential to the development of our behavior and view of the world, culture is, in and of itself, of universal value to human beings. While there are no legitimate universal systems of evaluation, there are many legitimate local ones, each structuring the ways of life of those within particular moral spheres. As such, these moral spheres should be not simply tolerated or viewed indifferently but affirmed and validated as local sources of the good. From the skeptical view that "nothing is really [objectively] either right or wrong," we move, in culturalism, to the view that what is right is what we have created and what in turn has created us. That is, for Sandel (1984, p. 247), "we live no 'answer', only answers" which we should validate as the source of each group's self-determination and self-perpetuation. This means that ethnocentric systems of evaluation can have no cross-cultural validity, even as an extension of an ongoing historical conversation. Each system of evaluation must remain firmly within its own moral space. Here, the ▶ well-being of groups (or cultural species) is seen to be dependent upon the perpetuation of a culture which is particularly theirs

(see Caney's, 2000, p. 62 discussion of "alien imposition"). The approach appears to assert the universality and objectivity of its account of human well-being as the ability to live according to the traditions of one's cultural group. Cross-cultural evaluation, in addition to being subjective, is also fundamentally harmful, as it calls "into question the dominant ▶ values of that society" and "the survival and independence of separate political communities" (Walzer, 2000, p. 61) causing, among other things, "alienation and resentment" (Taylor, 1975, p. 337). While apparently emerging from epistemological relativism, the nature of the culturalist normative approach differs significantly from anti-foundationalism. Though minimalistic, the account is seen both to apply to all humans and to exist independently of cultural consensus. This forms the basis for an unacknowledged system of cultural evaluation since culturalists do, and logically must, oppose those cultures or cultural practices which transgress the sovereignty of other cultures through imperialistic tradition or impulse. On this basis, expansionist, modern Western culture is criticized in particular.

There are serious issues with both positions. The former may either fail to take a position on the harm or otherwise of a culture's practices or regard the identification of harm as singularly subjective. The latter may be "subject to criticism. . .in its commitment to the status quo. The approval it enjoins seems to be absolute, leaving no room for judgment. . . [;] one cannot be indifferent toward other ways of life – it obligates us to approve what others do. The Boasian relativist is placed in the morally awkward position of endorsing the infant's starvation, the rape of abducted women, the massacre of whole villages" (Hatch, 1983, p. 371). An attempt to produce an objective, universal response to these moral and ethical quandaries, particularly in an era in which imperialism is viewed with general hostility, is fraught with difficulty and controversy. At present, a series of issues to be resolved, rather than answers, stand out.

Firstly, there needs to be serious further examination of the nature and purpose of culture. Evaluating cultures presumes that culture has an innate purpose or meaningful role. The many functionalist (e.g., Malinowski, 1944), structuralist (e.g., Lévi-Strauss, 1963), symbolic (e.g., Geertz, 2000), and constructivist (e.g., Latour & Woolgar, 1986) accounts of culture each offer different positions in this respect. In general, it seems sensible to assume that cultures perform a range of functions in various parts of life and that, particularly in modern societies, people are subject to a range of cultural traditions across their lives. Evaluating one part of culture may or may not require a different set of standards than evaluating another. Often, as in culturalist approaches, culture is associated with identity (see Galeotti, 2002), such that objections to cross-cultural judgment are grounded in opposition to assessments of practices and beliefs with which individuals or groups identify. In this vein, distinctions are often made between culture and religion, such that criticisms of a practice such as female genital mutilation are often leveled at the "cultural" traditions of particular Islamic or Christian groups, rather than their "true" faiths. In this sense, it is important to consider whether the subject of evaluation is a culture, society, or life or group of lives, since the use of each of these terms is flexible and seldom uniform. It seems reasonable to suggest that a form of evaluation aimed at analyzing societies needs to adopt a holistic account of culture, grounded, perhaps, in assessing the basic structure of society, as Rawls (1971, p. 7) put it. This would mean an analysis of the functioning of the various social institutions which, together, sustain a given society. Further thought, then, must go into determining the agency of individuals within that society with regard to the influence of cultures on their beliefs, behavior, and outcomes.

Secondly, there must be agreement on the dependent variable to be studied – that is, the end or good for which the culture is responsible. There are, potentially, deontological (right-based) and perfectionist (good-based) pathways here. A deontological position might, for example, employ the conceptions of justice in Rawls (1971) or Kukathas (2003) to evaluate the extent to which cultures promote respect for persons by protecting, in Kukathas' approach, freedom of

conscience and association. Of greater relevance to this encyclopedia are perfectionist approaches grounded in eudaimonic accounts of human well-being. There is, of course, an extremely large number of conceptions of the good and understandings of the content of well-being. The deployment of such conceptions in deleterious interventions in non-Western societies has, as discussed above, led many critical anthropologists to suggest that the notion of ▶ well-being as a universal concept is dangerous and flawed. While this gives reason for caution, it need not preclude the identification of goods of fundamental importance to human beings. Attempts to ground such goods empirically in cross-cultural surveys are often subject to refutation on the grounds of their absence in particularly diverse cultures (see Douglas, 2003, p. xxxvii). Rationalist attempts to identify fundamental goods may be less vulnerable, given that there is an assumption that human and cultural understandings of objective interests are fallible.

Approaches which combine rationalism with a multiply realizable understanding of human well-being, in which the good is seen to take different forms in different people and contexts, may also avoid elements of claims of ethnocentricity due to the capacity to affirm apparently divergent cultures. ▶ Flourishing, which is derived from the Aristotelian concept of living and doing well, has been seen to be preferable to ▶ utility or ▶ happiness by the likes of John Gray (1997, pp. 55–60) as it is potentially more attentive to the diverse ways in which people appear to realize ▶ well-being. There have been numerous attempts to advance objective, universal conceptions of well-being or flourishing in recent years: Gray has sought to draw upon value pluralism in affirming a range of diverse cultural forms while criticizing fundamentalist tendencies in neoliberal societies; Martha Nussbaum (2011) has sought to combine a thick vague conception of the good with a form of political liberalism in her capabilities approach, while John Finnis (2011) has revised neo-Thomist principle to advance a modern defense of natural law. These accounts provide scope to understand, in their diverse incarnations, the constituent elements of human well-being, enabling an objective defense of cultural forms which would otherwise, in relativist and culturalist schemes, be regarded with indifference or affirmation according to authenticity.

The third issue concerns the way in which and the extent to which cultures can promote ▶ well-being. It is necessary to understand, conceptually, the goods which a culture can protect, provide, or promote in order for humans to realize the good. Two approaches appear of relevance: needs and ▶ capabilities. For Gray (1997, p. 58) and Max-Neef (1991), needs include both physiological goods, such as food and water, and sociopsychological goods, such as meaning, love, and identity. The breadth of goods invoked points toward the derivative formulation of needs (Barry, 1990, pp. 47–49; also Max-Neef, 1991, pp. 17–18). Any good can be a need so long as it is presented in conjunction with an "in order to" clause denoting the achievement of some end (Barry 1990, p. lxv). That is, x is only a need when it is necessary to satisfy, achieve, or realize y. The good and the end may be of completely different moral standing. One means of dealing with different needs is outlined by Barry (1990, p. 49), who distinguishes normatively invocations of need into genuine needs of the sort associated with the sustenance of life and more superficial, secondary wants or goods associated with individual choice. This is because the former "constitute objectively identifiable ingredients of human well-being" which are extremely resistant to claims of cultural construction and which are of more direct and immediate importance to human well-being (Jones, 1994, p. 149).

Needs approaches have, though, been criticized as philosophically underdeveloped, insufficiently comprehensive, and focused solely on raising individuals to the level of subsistence (Sen, 1984, pp. 513–515). Capabilities approaches argue that, rather than merely providing goods, societies should create conditions for the realization of immanent human qualities and capacities by which to achieve flourishing. Nussbaum has sought to develop a conception of human ▶ flourishing which is sensitive to cultural

diversity and derived from human potential. She identifies a series of innate human ▶ capabilities for such things as bodily integrity, emotions, practical reason, control over their environment, and play, which can be realized in different ways in different cultures (Nussbaum, 2011, pp. 33–34). When developed into functions, these capabilities enable humans to flourish. The ability of humans to develop these functions depends upon the provision by cultures of particular resources, entitlements, and liberties. Cultures which inflict constraints on, say, bodily integrity through genital mutilation, or which prevent individuals from developing meaningful relationships with others, inhibit the ability of people to flourish (Nussbaum 2000, p. 215). However, this approach may be seen excessively to favor liberal societies and fail to accommodate the ranking of goods seen in certain needs approaches by regarding each capability as being of equal worth.

Having determined which conceptual approach provides the most effective scope for evaluation, it is necessary to consider issues of distributive justice. There are two key approaches: firstly, sufficientarian approaches seek to provide a sufficient or ample amount of goods by which individuals can achieve certain ends (Nussbaum, 2011, p. 41); secondly, egalitarian approaches regard political, economic, and social equality as being essential, morally, in order to recognize the fundamental worth of human beings and, instrumentally, in order to avoid, for example, the loss of (self-)esteem in hierarchical societies among the impoverished (Wilde, Forthcoming 2012). Here, there is a conflict between liberal approaches which emphasize political equality and the priority of ▶ liberty and Marxist approaches which believe that inequalities in resources lead to harmful political and social inequalities, justifying constraints on liberty in order to promote ▶ well-being.

Fourthly, it is necessary to consider the extent to which cultures can be held responsible for the ▶ well-being of individuals. There may be many different factors which affect the good, the most influential of which we might, with Gray, term "circumstance." The realist assumption, to which Rorty makes concessions through his acceptance of certain Darwinian tenets (see Rorty, 1991a, p. 12 above), is that the environment is, to some extent, independently determinate. Humans cannot simply talk volcanoes or hurricanes out of existence, no matter which words or meanings they employ. Nor can societies dispense with age-old means of engaging technologically with the environment to satisfy needs, without developing alternative modes of production. Moreover, intergroup relationships may be beyond the control of particular groups, since a rival group may decide, for instance, to invade on a whim. It may not always be possible to hold cultures responsible for such events. To criticize cultures on the basis of the ▶ quality of life of their members without reference to independent variables such as the various constituents of circumstance seems rash. It might, however, be reasonable to hold cultures responsible for the way in which they anticipate or respond to circumstance. This requires that humans understand accurately, rather than construct meaningfully, the various processes of the natural and social world. In order, say, to satisfy biological needs, it is necessary to shape culture in a manner which recognizes and responds effectively to the nuances, dynamics, and contingencies of the environment. Without successful engagement with the environment, we are unable to feed, water, and shelter ourselves or, even, to develop the goods by which to develop capabilities. In this sense, it may be possible to argue that cultures face the same broad challenges wherever they are but that the particular forms of cultural organization required to achieve these ends will differ from circumstance to circumstance. This implies the importance of some degree of philosophical particularism to a holistic rubric of evaluation.

Finally, it is important to consider whose ▶ well-being should be of importance in evaluating a culture. If cultures are judged solely by the extent to which, in a given circumstance, they affect the ▶ well-being of those regarded as group members, there is the possibility that the assessment will affirm those cultures which enslave or expropriate the resources of other peoples. Given the potential universalistic motivations of attempts to evaluate cultures,

such an assessment would seem perverse. Logically, it seems beneficial, therefore, to evaluate cultures according to their impacts on the ▶ well-being of *all* affected individuals – whether or not they are seen to belong to the culture under evaluation. Contra culturalism, this analysis need not be biased against cultures or cultural practices motivated by, or endowed with, expansionist tendencies. The mere fact that a culture contains imperialistic or narcissistic tendencies does not mean that it will expand or that that expansion need necessarily be deleterious. The Roman and Ottoman Empires, for example, were instrumental in bringing periods of affluence and stability to territories which may otherwise have been fractious. Conversely, as the case of North Korea demonstrates, the mere fact that a culture rejects expansionism does not mean that it will affect positively the well-being of members or that its isolationism will not affect the well-being of nonmembers. These examples seem to suggest that evaluations based solely or largely on the intentions, rather than the outcomes, of cultures may lead to perverse conclusions. By evaluating cultures according to the ▶ well-being of all those affected by their activities, it may also be possible to deal with potential analytical problems regarding the cultural unit. It means that it is not necessary to regard cultures as distinct or homogenous or attempt to map cultures onto particular figurations of individuals. It is possible, instead, to assess the outcomes of particular cultural forms – for example, particular ways of producing goods, distributing property, or organizing family structures – accepting that individuals, especially in the modern world, are often subject to practices with different origins and trajectories within the various spheres of their lives.

Cross-References

- ▶ Basic Needs
- ▶ Capabilities
- ▶ Cross-Cultural Comparison
- ▶ Cultural Diversity
- ▶ Cultural Values
- ▶ Deontology
- ▶ Egalitarianism
- ▶ Eudaimonic Well-being
- ▶ Family Structure
- ▶ Flourishing
- ▶ Human Needs
- ▶ Liberalism
- ▶ Liberty
- ▶ Quality of Life (QoL)
- ▶ Utilitarianism

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Cultural Goods and Services (Consumption of)

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Synonyms

Cultural capital

Definition

Consumption of various cultural goods and services, ranging from arts and heritage products to filmmaking.

Description

Consumption of cultural goods and services the world over has increased dramatically with the advent of more global trading. One of the major sources for tracking the flows of cultural goods is provided via the United Nations. The Global Indicator Database includes data on culture and, as such, is a valuable source for exploring consumption of cultural goods. The link is provided below (United Nations, 2012).

http://data.un.org/DataMartInfo.aspx

Global Indicator Database

Source: United Nations Statistics Division

The Global Indicator Database is comprised of a wide range of important statistics and metadata drawn from the United Nations, UN agencies, and other international sources. It covers key economic, social, financial, and development topics, broadly based on the structure of the UN Statistical Yearbook (SYB). Series are grouped under the headings agriculture, forestry and fishing, balance of payments, culture and communication, development assistance, education, environment, financial statistics, gender, international finance, international merchandise trade, international tourism and transport, labor force, manufacturing, national accounts and industrial production, nutrition, population, wages, and prices.

http://data.un.org/DataMartInfo.aspx
http://unstats.un.org/unsd/default.htm

Authors Anne-Ce´lia Disdier, Silvio H. T. Tai, Lionel Fontagne, and Thierry Mayer explain cultural consumption from a global vantage point in their article, Bilateral Trade of Cultural Goods (2009, p. 2).

> In most countries, household expenditures on recreation and culture1 account for around 5 % of GDP. In 2005, this share was 6.4 % in the United States, 5.5 % in Canada, 7.7 % in the United Kingdom and 5.2 % in France. In 1970, those were 4.5 % in the United States, 4.9 % in Canada, 5.1 % in the United Kingdom and 4.3 % in France (OECD 2007). Apart from the increase in income per capita, a frequent and presumably important explanation of this growth of cultural expenditures over the last decades is the emergence of the information society, combined with the development of leisure and of cultural tourism. This growth in consumption is associated with an impressive rise

in trade. Between 1980 and 1998, world imports of cultural goods2 have increased by 347 % going from 47.8 to 213.7 billion of US dollars (UNESCO 2000). According to United Nations Comtrade data, world imports of all commodities increased by 189 % between 1980 and 1998. An unexpected outcome is that in 1996, cultural products became the largest export industry of the United States, surpassing, for the first time, traditional manufacturing industries.3 An interesting characteristic of these cultural trade flows is their high concentration: most of world trade in cultural goods is the fact of a remarkably small number of countries. In 2002, the United States, the United Kingdom, China (including Hong Kong and Macao), Germany and France accounted for 55.5 % of total exports and 53.5 % of total imports (UNESCO 2005). For global trade, these percentages were 39.7 % for exports and 45.3 % for imports.

Further, they provide a listing of what comprises cultural goods, using the UNESCO classification:

Core and Related Cultural Goods

Cultural heritage
Collections and collectors' pieces
Antiques of an age exceeding 100 years
Books
Books, brochures, leaflets, etc.
Children's pictures, drawing/coloring books
Newspapers and periodicals
Other printed matter
Printed music
Maps
Postcards
Pictures, designs, and photographs
Recorded media
Gramophone records
Disks for laser-reading systems for reproducing sound only
Magnetic tape (recorded)
Other recorded media for sound
Visual arts
Paintings
Other visual arts (statuettes, sculptures, lithographs, etc.)
Audiovisual media
Video games used with a television receiver
Photographic and cinematograph films, exposed and developed
Equipment/support material
Musical instruments
Sound player recorder and recorded sound media
Cinematog. and photographic supplies
Television and radio receivers
Architecture plans and drawing trade and trade advertisement material (Source: Disdier et al., 2009, p. 6)

Cross-References

▶ Cultural Capital
▶ Cultural Health Index

References

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Cultural Health Index

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Description

Currently, this term is being used to describe a comprehensive project by the New Zealand Ministry for the Environment.

A Cultural Health Index for Streams and Waterways: Indicators for Recognizing and Expressing Maori Values

See the following website for links to the publication and discussion of its development. It combines both cultural knowledge of the indigenous Maori and scientific techniques.

http://www.mfe.govt.nz/publications/water/cultural-health-index-jun03/

Cross-References

► Cultural Indicators

Cultural Indicators

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Synonyms

Creative (or cultural) vibrancy; Creative vitality; Cultural vitality

Definition

Sets of measures used to quantify the amount of creative and/or cultural expression in a geographic area. Typical sets of indicators include economic (e.g., organizations, revenues) and behavioral measures (e.g., ticket buyers, activities).

Description

Cultural and creative activities are critical for improving quality of life in communities. Culture helps members of communities feel connected to one another by maintaining and expressing their society's beliefs; creativity promotes new ways of thinking, which helps individuals and societies better adapt to changing conditions and build their capacity to address problems.

But creativity and culture, like love and compassion, are themselves impossible to measure. Creativity happens every day. Culture is expressed everywhere. But what can be measured are outputs, economic activities, participation, and levels of support.

Creativity and culture are best understood by their outputs – objects, performances, and social activities (such as festivals).

Economic activity includes such things as the number of creative sector establishments (i.e., businesses and organizations engaged in the arts or cultural activities), creative and cultural sector workers, creative economy workers (which include those in creative industries as well as others, such as graphic designers, who work in-house for industries not generally considered part of the creative sector), payrolls, gross revenues, and tax receipts. A strong example of this research can be found with the New England Foundation for the Arts (http://www.nefa.org/sites/default/files/NEFANonprofit Study_3-2010.pdf).

Participation measures the number of people attending or participating in creative activities. Measures include the number of ticket buyers, attendees at arts events, viewers or listeners for televised or online creative products and experiences, and people who create art as a hobby or second (or third) job. Examples of this type of research can be found in the research website of the National Endowment of the Arts (http://www.nea.gov/research/researchreports_chrono.html).

Levels of support include direct financial contributions and indirect contributions (also called in-kind support) by governments, foundations, and other sources of capital in society. In-kind support can be quantified by estimating the fair market value of the good or service. This set of metrics allows researchers to assess how creativity and culture are valued by dominant forces in society. Americans for the Arts, a national arts advocacy organization, provides a good example of this type of research (http://www.artsusa.org/pdf/get_involved/advocacy/research/2011/govt funding11.pdf).

Just as there is no single definition of art, there is no universal approach to measuring cultural indicators. Typically, what is measured is a function of the researchers' assumptions, combined with budgetary and time restrictions. Even under the best of circumstances, culture and creativity will be undercounted. Multiyear trend analysis can help researchers determine growth or decline in cultural indicators in an area.

The most comprehensive data for cultural indicator analysis at the national or regional level tends to come from government agencies and nongovernmental organizations involved in any of these activities: arts, culture or historic preservation, tourism, or economic development.

Large cities or those whose economies are largely tied into the arts (such as Santa Fe, New Mexico in the United States) may also have citywide data from their cultural or economic development agencies. However, in many cases, the researcher is likely to have to undertake original research. Depending on the type of information sought, usually this involves assessing and surveying artists and arts organizations, as well as businesses and governmental organizations that support or benefit from the arts.

While there are many efforts to create a universal set of metrics for cultural indicators, they have failed for two reasons: there are no universal definitions of arts, culture, and creativity, and a great deal of culture and creativity happens in ways that are often unmeasured. However, comparing data across time and measurement standards can provide useful information to decision makers, stakeholders, and future researchers.

Cross-References

- ▶ City Culture Maps
- ▶ Cultural Diversity
- ▶ Indicator Methodology

References

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National Endowment for the Arts (United States): http://www.nea.gov

Cultural Influences on Self-Reported Happiness

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Description

Culture shapes values, beliefs, ▶ attitudes, and behaviors of individuals as a group (Dilworth-Anderson & Burton, 1999), and the way in which individuals express themselves and expose their emotions may vary by cultural orientations. Because most research on ▶ quality of life and emotional well-being relies on self-reports, the potential influence of culture on reports of emotion emerges as a topic of importance. This entry addresses the issue by reviewing literature on ▶ differential item functioning (DIF) of the ▶ Center for Epidemiologic Studies Depression scale (CES-D; Radloff, 1977).

Since its initial development in the 1970s, the CES-D has been widely used as a screening tool for depression in both clinical and research settings. Although it was based on samples composed largely of European-Americans, the CES-D has now been translated into more than 50 different languages. These versions of the CES-D have excellent psychometric properties, and the instrument is generally held in high regard by researchers around the world. The availability of multiple translations and the wide acceptance of the instrument have led to both the use of the CES-D in diverse cultural groups and concerns about its cross-group comparability or measurement equivalence.

Problems with measurement equivalence are evidenced by differential item functioning (DIF). DIF occurs when respondents from different groups show differing tendencies towards endorsing an item despite having been matched with respect to the overall ability or attribute that the item is intended to measure (Dorans & Holland, 1993). Studies using several analytic techniques have identified DIF in the CES-D across diverse groups. One of the most common findings is that African Americans are more likely than non-Hispanic Whites to endorse items reflecting problematic interpersonal relationships ("people are unfriendly" and "people disliked me") (e.g., Blazer, Landerman, Hays, Simonsick, & Saunders, 1998; Cole, Kawachi, Maller, & Berkman, 2000; Kim, Chiriboga, & Jang, 2009). Research on young adults by Iwata and colleagues (Iwata & Buka, 2002; Iwata, Turner, & Lloyd, 2002) reports that African Americans and Native Americans are more likely to endorse somatic symptoms over affective symptoms. The findings on race-based DIF suggest

that researchers should take caution when using the CES-D in the context of cross-group comparisons because the observed mean differences may be attributable to item response bias rather than to true differences in mental health status.

Another area of potential cultural biases is responses to the items on ▶ positive affect. Most screening instruments, including the CES-D, contain both positively and negatively worded items. Using a mix of positive and negative wording is indeed one way to avoid agreement bias or acquiescence (e.g., Anastasi, 1982). However, studies have called attention to potential response biases associated with the phrasings of items. It has been suggested that culture has a strong influence on the over- or under-endorsement of items phrased in certain ways (DiStefano & Motl, 2006; Iwata & Buka, 2002).

Response biases on positive-affect items are a particular issue in Asian cultures, which often value modesty and self-effacement as cultural virtues and inhibit the expression of positive emotion (Iwata & Buka, 2002; Jang, Kim, & Chiriboga, 2005). Jang and colleagues (2010) conducted a series of DIF analyses using Multiple Indicators Multiple Cause (MIMIC) models with three large data sets of elderly non-Hispanic Whites, Korean Americans, and Koreans living in Korea and found interesting patterns in self-reports of emotions. Compared to Whites, both Korean Americans and Koreans were less likely to endorse each of the two positive-affect items ("I felt happy" and "I felt hopeful"), even when the overall level of depressive symptoms and covariates were controlled. It is interesting to note that the same pattern of DIF was observed in the comparison between Koreans and Korean Americans, with the Koreans being less likely to endorse the positive items than were the Korean Americans. In addition, the sample of Korean Americans provided a unique opportunity to further explore the role of culture and acculturation in response patterns. *Acculturation* refers to the degree to which a person from another culture has learned the language and behaviors expected of persons who live in the host culture (Sam & Berry, 2006). It is also expected that people adopt the ways of thinking and expressing that are prevalent in the host culture. The study hypothesized the DIF for the two positive-affect items between Korean-American older adults with low acculturation and those with high acculturation and found supportive evidence for the reduced likelihood of endorsing positively worded items among the less acculturated group. The higher level of adherence to their original culture, which emphasizes moderation in expressing feelings and emotions, may be responsible for their reluctance to respond positively to the positive-affect items. Consistent with Confucian principles, traditional Korean culture places a high emphasis on modesty and self-effacement, and it is a cultural norm not to express positive personal emotions such as ▶ happiness. The restricted exposure of positive emotions is also understood as a consideration for those less fortunate from a perspective of ▶ collectivism. On the other hand, those who are highly acculturated may be more accustomed to Westernized ways of thinking and expressions. The free expression of personal emotions may have been acquired through the process of acculturation and social learning.

The demonstrated findings call attention to the possibility that the rates of depressive symptoms in racial/ethnic groups may be misestimated due to their response styles. Given that cultural orientations may systematically bias individuals' responses to inventories, researchers should be cautious about using simple mean comparisons and a universal cutoff point. In the presence of DIF, such approaches may lead to inaccurate prevalence estimation and invalid group comparisons. Regrettably, there is at present no standard approach to correcting for DIF, which calls attention to the urgent need for more research in this area. Improving understanding of these cultural variations will be the first step towards developing culturally sensitive assessment tools. Development of such an instrument will facilitate accurate detection of mental health problems and identification of high-risk subgroups of cultural groups.

Cross-References

- ▶ Cultural values
- ▶ Measurement invariance

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C

Cultural Life

- ▶ Community Values

Cultural or Ethnic Homogeneity Preference Index

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Synonyms

Modern prejudice; Racism; Sexism

Definition

This index was designed to measure the degree to which a respondent has a preference for associating with people with cultural or ethnic backgrounds similar to his or her own.

Description

Following the work by McConahay (1986); Morrison, Morrison, Pope and Zumbo (1999); and Swim, Aikin, Hall and Hunter (1995), the index was introduced by Michalos and Zumbo (2001) as one of several indexes designed to provide an overview of people's attitudes and beliefs concerning the cultural or ethnic background of others. The index was formed by

calculating respondents' average score on the following five items:

1. You would prefer to live in a neighborhood in which most people have the same cultural or ethnic background as you.
2. It is best if most people's friends have the same cultural or ethnic background as they do.
3. A person's social functions should be mainly with people with the same cultural or ethnic background.
4. If you had or have a son or daughter, you would prefer to have him or her marry someone with the same cultural or ethnic background.
5. Marriages between couples with the same cultural or ethnic backgrounds tend to be happier than others.

On a 5-point ▶ Likert scale, a score of 1 would mean that a respondent does not have a preference for associating with people with cultural or ethnic backgrounds similar to his or her own. A score of 5 would mean that a respondent prefers to associate with people with cultural or ethnic backgrounds similar to his or her own.

The average score for 737 respondents 18 years or older drawn from a random sample of households in Prince George, British Columbia, was 2.3, with a range from 1.0 to 5.0. The average item-total correlation was $r = 0.62$, with a Cronbach reliability coefficient alpha of 0.83.

Cross-References

- ▶ Happiness
- ▶ Life Satisfaction
- ▶ Perceived Quality of Life
- ▶ Subjective Indicators

References

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Cultural Perspectives on Health-Care Quality

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Definition

In 1995, the Agency for Healthcare Research and Quality (AHRQ) created the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) survey to create a standardized set of surveys to describe patients' perspectives on the quality of their health plans. The CAHPS® surveys have since become a cornerstone for evaluations of health-care quality across health plans and settings (Agency for Healthcare Research and Quality, 2009). However, as Morales, Weech-Maldonado, Elliott, Weidmer, and Hays (2003) note, "Most existing consumer surveys were developed for a target population consisting of persons who are employed, insured, acculturated, English-proficient, well-educated, and of moderate to high socioeconomic status." Research shows that a variety of patient characteristics are associated with differences in perceptions of health-care quality and should be taken into consideration when interpreting quality ratings (Becker & Tsui, 2008; Fongwa, Sayre, & Anderson, 2008). These findings call into question whether CAHPS® and other questionnaires capture adequately the conceptions of health-care quality of members of ethnic minority groups.

Seeking to explore the question of what constitutes "quality" in a health-care encounter from

Cultural Perspectives on Health-Care Quality, Table 1 Characteristics of focus group participants

	African Americans	Latinos	Asian Indians	Whites	Total
Participants (n)	24	19	20	21	84
Distribution	(%)	(%)	(%)	(%)	(%)
Gender					
Female	75	53	35	57	56
Male	25	47	65	43	44
Age					
18–25	13	63	60	29	39
26–45	42	26	25	48	36
46 and older	46	10	15	24	25
Education					
High school or less	13	11	10	10	11
Some college	33	63	45	52	48
College graduate	54	26	45	38	42
Household income					
Less than $40,000	29	47	10	19	26
$40,000–$59,999	13	21	20	14	17
$60,000–$79,999	21	11	15	29	19
$80,000–$99,999	13	0	15	24	13
$100,000 or more	25	16	40	14	24
Missing	0	5	0	0	1
United States residence					
Born in the United States	92	47	45	100	73
Resident less than 10 years	0	16	25	0	10
Resident 10 years or more	8	32	30	0	17
Missing	0	5	0	0	1
Number of physician visits last year (average)	25	47	40	76	12

the patient perspective, this study examined cultural differences in perceptions of health-care quality across four racial/ethnic groups: African Americans, Latinos, Asian Indians, and whites. Participants were asked to define quality in the context of a visit to a primary care physician and to describe their ideal visit and the characteristics of an excellent physician.

Description

Methodology

The study team held eight focus groups (two for each ethnic group) with a total of 84 participants recruited through cold calls to targeted zip codes, fliers posted in the vicinity of where the groups would be held, and an advertisement posted on Craigslist (an online site for classified ads, including community events and job listings). Table 1 presents basic demographic information about study participants by ethnic group. The small sample size and unreliability of estimates preclude reporting of inferential statistics to compare the different groups to each other or to the larger US population.

Researchers collected qualitative data during two 90-minute sessions which were split evenly into 45-minute segments. Using CAHPS® as a framework for discussion, participants viewed and discussed a Kaiser Permanente video of an encounter between a white male physician and an elderly, female Asian patient. The purpose was to determine whether participants viewing the same encounter had different perceptions of the quality of care depicted. The other 45-min segment included a more general discussion of the definition of "quality" in health-care

encounters. Researchers altered the order of the 45-min segments (i.e., one of the two focus groups for each ethnic group started with the video and the other started with the more general discussion) to address the possibility of bias in the order of presentation. Data analyses revealed no differences in response patterns based on segment order.

Components and Concepts of Health-Care Quality

Table 2 presents the key components of health-care quality mentioned during focus group discussions, including an example of how the concept can contribute to a good quality health-care visit and the source of the concept (i.e., core CAHPS®, supplemental CAHPS®, or excluded from the CAHPS® but mentioned by focus group participants). The following four concepts were among the most frequently mentioned across all four ethnic groups as significant components of quality in health-care encounters: waiting times, ► patient-provider communication, a doctor's technical skills, and a doctor's respect for patients; however, interpretation and definition of these concepts varied by ethnic/racial group.

Waiting Times

The CAHPS® surveys address the question of waiting time with respect to the structure and process of care (i.e., time it takes to obtain an appointment and the time patients spend waiting in the reception area and in the exam room). The implicit assumption in quality surveys is that long waiting times are likely to negatively influence patients' ratings of health-care quality. Study participants affirmed this sentiment, citing waiting times as one of the most important components of quality care. However, participants also cited situations in which they did not mind waiting. Study participants felt that there should not be a set time for how long a given visit should take but that it should take "as long as needed" to resolve a patient's complaint. In some cases, participants felt that long waiting times could even be an indicator of higher quality care if the physician gave each patient his or her full attention. However, participants were in agreement that waiting times to receive an appointment should be as short as possible.

Patient/Provider Communication Issues

Effective communication between patients and their health-care providers has been shown to improve the quality of health care (Street, Makoul, Arora, & Epstein, 2009). It is a strong predictor of overall patient satisfaction and is associated with improved health outcomes (Thornton, Powe, Roter, & Cooper, 2011; Jangland, Gunningberg, & Carlsson, 2009). Notably, research suggests that members of racial and ethnic minority groups are more likely to report communication barriers with their physicians, especially when the patient and provider have different ethnic or language backgrounds (González, Vega, & Tarraf, 2010; Cristancho, Garces, Peters, & Mueller, 2008).

In this study, participants expressed two prevailing and competing views of a physician's role in communicating with patients (both views were represented across each racial/ethnic group). One set of participants felt that it was a physician's responsibility to show empathy and to know a patient at a personal level in order to encourage trust and willingness to share information that might be pertinent to diagnosis and treatment. However, another set of participants felt that physicians must be objective and impersonal. For this group, a personal level of communication and sympathy impedes judgment and could interfere with the provision of high-quality care. Despite these starkly different perspectives on physicians' roles in communicating with patients, most participants agreed that it is important for the physician at least to make a point of showing some familiarity with the patient's care to build trust.

Nurses' communication skills were cited as a model by minority group participants. In general, they felt that nurses were often better than physicians at explaining problems and treatments. Some said that they actively seek out care from nurse practitioners. Several participants attributed differences in communication skills to differences in training between physicians and nurses and suggested that physicians

Cultural Perspectives on Health-Care Quality, Table 2 Key concepts associated with quality in health care

Concept[a]	Example of concept in good quality care	Source[b]
Choice	Doctor presents patient with treatment options	Supplemental CAHPS®
Collaboration	Doctor collaborates with other providers	Focus group
Consensus	Patient and doctor use consensus in decision making	Focus group
Cost	Doctor considers cost in treatment recommendations	Supplemental CAHPS®
Culture	Doctor is aware of and sensitive to patient's culture	Focus group
Demeanor	Doctor's demeanor is caring and sensitive	Supplemental CAHPS®
Depression	Doctor screens patients for depression	Supplemental CAHPS®
Efficiency	Office visits are efficient	Focus group
Expertise	Doctor's expertise and technical skills are up to date	Focus group
Explanations	Doctor's explanations are clear	Core CAHPS®
Facility	Facility is clean and accessible	Focus group
Follow-up	Doctor follows up with patients on test results	Core CAHPS®
Gender	Doctor takes into consideration the patient's gender	Focus group
Health concerns	Health concerns of patient are adequately addressed	Core CAHPS®
Holistic approach	Doctor takes a holistic approach in treating patients	Focus group
Insurance status	Insurance is not a factor in providing care	Focus group
Listening ability	Doctor listens carefully	Core CAHPS®
Medical history	Doctor is aware of patient's medical history	Core CAHPS®
Multitasking	Doctor avoids multitasking during the visit	Focus group
Needs of elderly	Doctor is aware of special needs of elderly patients	Focus group
Nurses	Nurses provide enhanced care and communication	Focus group
Patient informed	Patient is informed of wait time	Supplemental CAHPS®
Prescription drugs	Doctor explains reason for prescribing medications	Focus group
Prevention	Doctor educates patient on prevention measures	Supplemental CAHPS®
Privacy	Doctor respects patient's privacy	Focus group
Rapport	Doctor develops a rapport with patient	Focus group
Receptionists	Receptionists are friendly and helpful	Core CAHPS®
Recommendation	Patient is willing to recommend doctor to others	Supplemental CAHPS®
Referrals	Doctor makes appropriate referrals	Supplemental CAHPS®
Respect	Doctor shows respect for patient	Core CAHPS®
Tests	Doctor orders appropriate tests	Core CAHPS®
Thoroughness	Doctor provides a thorough examination	Supplemental CAHPS®
Time	Doctor spends sufficient time with patient	Core CAHPS®
Trust	Patient trusts doctor	Focus group
Waiting time	Waiting time is reasonable	Core CAHPS®

[a]The concepts are listed in alphabetical order.
[b]Each of the key concepts is assigned to one of three sources using the following hierarchy: (1) core CAHPS® = concepts that are included in the core CAHPS® survey instrument, (2) supplemental CAHPS® = concepts that are excluded from the core CAHPS® instrument but included in one of the supplemental survey available at that time, and (3) focus group = concepts that were not currently included in existing CAHPS® surveys but were mentioned as important factors of health-care quality by focus group participants

receive more training of the kind that nurses receive in interpersonal communication. These attitudes were common across all racial/ethnic groups.

Participants' held mixed views on the responsibility of a physician to encourage patient disclosure of health status and concerns. Because some patients may be reluctant to share personal information that could ultimately assist physicians with diagnosis and decisions on treatment options, one set of participants said it was the physician's responsibility to ask open-ended

questions to encourage more personal disclosure. Although participants acknowledged a patient's responsibility for facilitating open communication, they also felt that the ultimate responsibility lies with the physician as the professional. The second set of participants placed much greater responsibility on the part of patients. In the words of one participant, "How will the physician know what other problems the patient has if she won't tell him?" These participants did not see it as the physician's role (or as part of their training) to counsel patients to facilitate more open communication.

Doctor's Technical Skills

Patients expect their physicians to show competence in their medical skills. Some participants said they were put off when physicians had to consult medical texts during routine office visits. Others said that they did not mind seeing a physician whose demeanor was uncaring or unsympathetic so long as the doctor was able to diagnose and treat them accurately. Technical skills were particularly important in assessments of specialists; participants had very low expectations for their social skills but high expectations for their ability to resolve a health condition.

Doctor's Respect for Patient

The importance of a provider's respect for his or her patient was commonly mentioned in focus groups with members of racial and ethnic minority groups. However, the definition of respect included many concepts not traditionally considered in most health quality assessments. For example, although a doctor's willingness to listen to a patient's health concerns and acceptance of patients' views is a common definition of respect and was mentioned across all ethnic groups in our study, waiting time was also seen as a component of respect. A number of participants said that they feel "disrespected" when they have to wait for a long time to see their provider, especially when they are not given adequate time with the physician during the appointment. Participants in the Indian group also noted that the physician in the video at one point turned the sole of his shoe to his patient and pointed out that this gesture is considered extremely disrespectful in many cultures; thus, doctors should also be aware of cultural differences that might affect perceptions of a physician's respect for patients.

Importance of Cultural Competency in Assessing Health-Care Quality

A number of themes arose during the focus groups with members of racial and ethnic minority groups that either were not, at that time, being adequately captured in the CAHPS® surveys or were not included in discussions with white respondents. These findings suggest that there are concepts related to quality in health-care encounters that are not adequately addressed in existing questionnaires. However, note that since the time that this research was carried out, AHRQ has introduced a cultural competence item set for the CAHPS® surveys (AHRQ, 2012).

With the exception of white participants, issues of cultural competency arose in a variety of contexts during the group discussions. Cultural competency is viewed by most groups as an openness to cultural differences and the ability of physicians and providers to accept each patient as an individual. While each ethnic group had a different concept of cultural competency, one common thread tied competency to communication, rather than a base of knowledge. For Indians in the focus groups, competency involves taking a holistic approach to patient care and respecting the traditional beliefs and practices of their patients. Latino participants attributed competency to staff diversity, while African Americans emphasized the importance of generational issues as a factor in cultural competency.

Related to the issue of cultural competency, there were varied definitions of health-care quality, some of which were not addressed in the CAHPS® survey. African Americans defined quality as a sense of trust and an ability of the physician to really listen to his or her patients. They were more likely to say that physicians should focus on communication and show some familiarity with their patients (e.g., knowing and asking about the patients' family members) while at the same time demonstrating up-to-date

knowledge and professionalism. Latinos also emphasized communication but more often in terms of the physician asking the right questions. Indians were more likely to define quality with respect to technical skills and maintaining patient privacy. Unlike members of other groups, Indians were more likely to say that doctors are trained in medical diagnosis and treating symptoms and should not be judged on their bedside manners. Although whites tended to emphasize factors mentioned in CAHPS® questionnaires (e.g., short waiting times, doctor's ability to listen to patient, provide clear explanations, and be knowledgeable), one of the two groups discussed the importance of results as an indicator of quality (i.e., is the problem for which the patient sought care resolved?).

Keys to Improving Communication

Effective patient-provider communication is essential for ensuring quality health care. The following key points for improving the process emerged from focus group sessions:

1. Develop and demonstrate familiarity with the patient during health encounters.
2. Achieve greater cultural competency by practicing good listening and communication skills and understanding what is important to each patient.
3. Acknowledge patients' and providers' roles and responsibilities for encouraging an open dialogue.
4. Enhance medical training for physicians to focus on more therapeutic communication skills.

Study Limitations

One limitation of the study design is that it looked at perceptions of quality at a single point in time. Since patients' definitions of quality may change over time, future research should examine ethnic differences in perceptions of health-care quality longitudinally (Jackson, Chamberlin, & Kroenke, 2001). The study's findings should also be confirmed using larger sample sizes and include controls for other factors associated with perceptions of health-care quality (e.g., education, age, and marital status).

Cross-References

- ▶ Accessibility
- ▶ Asian Versus Western Views
- ▶ Care (or Medical Care), Satisfaction with
- ▶ Communication and Personal Well-being
- ▶ Complementary and Alternative Medicine (Cam)
- ▶ Consumer Choice
- ▶ Consumer Well-being
- ▶ Cross-Cultural Comparison
- ▶ Cultural Perspectives on Health-Care Quality
- ▶ Ethnic Minorities
- ▶ Focus Groups
- ▶ Health
- ▶ Immigrants, an Overview
- ▶ Patient-Physician Communication
- ▶ Qualitative Methods

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Cultural Resources

► City Culture Maps

Cultural Studies

► Anthropology

Cultural Valuations

► Cultural Values

Cultural Values

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Synonyms

Cultural valuations

Definition

There are two deeply related concepts combined: the one of values and the one of culture. The former, which can open to various ambits, but whose significance core is found in that property or group of properties attributed to a concrete or ideal entity (Frondizi, 1979, p. 17) gave origin to a field of its own in Philosophy, the one of Axiology. But the term is also related to the notion of culture, in this case, anthropologically understood, as a whole that comprises beliefs, practices, and customs as the intangible patrimony of people, transmitted through generations by the process known as primary socialization (Berger & Luckmann, 1976). A lot has been written about these topics since the English anthropologist Edward Tylor formulated his initial definition of culture. In 1871, the author included in that definition: "the knowledge, beliefs. . . moral, law. . ." all of them "in a complex whole," key words that enclose the ordering role of culture in society and its result, the universe organized by it (Tylor, 1975, p. 29). In this creative, dynamic, adaptative framework of the man in the development of his social life, they tie themselves intimately the values that found the norms that rule that life and the justifying body—not necessarily systematized—of its knowledge and beliefs. The same is understood by Goodenough (1975, p. 211) when he affirms that "the guiding principle of priorities manifested in a mass of social rules represents a group of values" and rightly recommends, in the following paragraphs, that "detailed and careful analysis of the rules to obtain the values that they manifest are necessary" (p. 213).

Description

The role of values as guidelines of human action and its association with culture is an interesting approach enunciated by Talcott Parsons in various works. In one of them, he deepens into this guiding action of values as from the symbolic activities of men originated in his capacity of abstraction, and he classifies them as "cognitive," "expressive," and "evaluating" ones. The first

have to do with the way the universe is perceived and organized by the mind, giving place to "beliefs" or "ideas" and they have a deep relation with the environment (in a comprising sense, natural and social). The second ones have to do with affective states that intercross with action. Both merge, define, and solve in evaluating activities. Thus, the authors point out that "the system of symbols in which the evaluating function has primacy constitutes what we will call normative ideas or regulating symbols" (Parsons & Shils, 1968, p. 197). These value orientations translated into behavioral norms affect and are inserted in the social order. In the words of the authors, "the value orientations converted in cultural patterns (. . .) have the potentiality of becoming the common values of the collectivity members. In concrete, they have overwhelming participation in the social interaction processes" (p. 199). But these authors that adjusted to their functional approach do not take into account the environmental and interaction sceneries, which change along the evolving and differentiated processes of human societies. These processes are translated into the ample social and cultural diversity that proves Goodenough's recommendation accurate, since being these values overlapped with different beliefs and feelings, they acquire their own logic, inside which they are understood and give sense to life, leading to ethnocentrism and allowing mutual and dangerous misunderstandings between cultures, too.

That cultural and social diversity related to values is reflected in the perception of quality of life by subjects as well as by groups of which they are part, and in that sense, Hofstede (1979), approaching the cultural relativity of the quality of life's concept, points out that quality, by definition, is a matter of values and that is related to standards of "good" and "bad," adding that those values depend partly on personal elections and largely on cultural context.

Hofstede (1979, 1980) reports comparative works about national differences of various countries regarding their value patterns related to work.

Kuan et al. (2010) point out that research on well-being and the quality of life has often examined the influence of variables such as value orientations and lifestyles on the level of happiness and satisfaction (Ryan & Dziurawiec, 2001) and that the study of values and lifestyles has been fruitfully integrated into psychographic profiling, a body of techniques that help to define groups of people based on anthropological, sociological, and psychological factors (Demby, 1994), being one of the most well-known psychographic profiling methods, the Values and Lifestyles (VALS) system reported by Arnold Mitchell (1983), adapted and used in many countries in Europe and Asia. The authors continue this work analyzing the Asia Barometer Survey (2006), using basically the Singapore data and comparing it to other countries of Eastern Asian.

Other authors, such as Bognár et al. (2010), approach the values of young adults from Bulgaria and Hungary, paying special attention to psychosomatic values such as health, physical activity, and free time, and to activities such as sports, trips, and walks, reporting that activities like relaxation, sleeping, reading, and watching TV are preferred to sports and trips. They confirm that the emphasis on family, health, and love by adults participating in the survey reveals the presence of morals and self-development as well as pro-social and personal values.

Cross-References

- ▶ Collective Action
- ▶ Collective Responsibility
- ▶ Community Cohesion
- ▶ Community Participation
- ▶ Community Satisfaction
- ▶ Community Values
- ▶ Community Well-Being
- ▶ Cultural Diversity

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Cultural Vitality

▶ City Culture Maps
▶ Cultural Indicators

Cultural Well-Being

▶ Systemic Quality of Life Model (SQOL)

Cultural/Cross-Cultural Psychology

▶ Anthropology

Cultural/Social History

▶ Anthropology

Culturalism

▶ Ethnocentrism

Culture

▶ Arts and Quality of Life
▶ Design, an Overview

Culture of Trust

▶ Trust

Cumulative Disadvantages

▶ Social Exclusion

Cumulative Logistic Regression

▶ Ordered Logit Model

Cumulative Logit Model

▶ Ordered Logit Model

Cumulative Stress Disorder

▶ Post-traumatic Stress Disorder (PTSD)

Cumulative Trauma Disorders

► Musculoskeletal Diseases

Curvilinear Effect

► Nonlinear Effect

Customer Satisfaction

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Synonyms

Buyer satisfaction; Consumer satisfaction; Shopper satisfaction

Definition

Customer satisfaction is an evaluative judgment of varying type/quality and intensity that a product/service itself, or a feature of it, does fulfill expectations. Accordingly, customer satisfaction is a consumption-related fulfillmentresponse ranging between levels of perfect fulfillment and overfulfillment. Typical manifestations of customer satisfaction are ► pleasure, delight, ► contentment, and relief. Under-fulfillment of expectations is believed to cause customer dissatisfaction. Formation of customer (dis)satisfaction requires at least a minimum amount of direct experience with a product/service.

An overview of other less frequently used conceptual definitions of customer satisfaction than the one referred to here (Oliver, 2010) can be found in Giese and Cote (2000).

Description

Antecedents of Customer Satisfaction

Historically, customer satisfaction research is strongly tied to the expectancy disconfirmation paradigm (see Oliver, 2010, for an overview), assuming that consumers are satisfied when actual outcomes exceed expectations (positive disconfirmation), dissatisfied when expectations exceed outcomes (negative disconfirmation), and just satisfied when outcomes match expectations (zero or simple disconfirmation). This basic disconfirmation mechanism has been extended and refined by taking four additional antecedents of customer satisfaction into account, namely, (1) pre-consumption satisfaction-level expectations, (2) subjective price-performance ratio (i.e., subjective *value-for-money* assessment), (3) affective states, and (4) ► equity perception, defined as a fairness judgment that consumers make in reference what others receive. A meta-analytic synthesis of past studies (Szymanski & Henard, 2001) has corroborated the positive impact of all five antecedents on customer satisfaction mentioned above, but has found different effect size magnitudes. ► Equity perception has the largest impact on customer satisfaction, followed by disconfirmation and subjective price-performance ratio. Affect and pre-consumption satisfaction-level assessments do play a less important role in predicting customer satisfaction.

In understanding the antecedents of customer satisfaction, various refinements of the expectancy disconfirmation paradigm have been proposed (see, e.g., Oliver, 2010). One of the most general and parsimonious frameworks may be congruity theory (Sirgy, 1985). Congruity theory posits that pre-consumption self-images and other expectations regarding utilitarian, economic, hedonic, and moral aspects of product/service consumption are matched against the perceived fulfillment on the corresponding, previously formed expectancy dimensions (see e.g., Bosnjak, Sirgy, Hellriegel, & Maurer, 2011, for a recent application in the service sector). The stronger the congruity impressions, the more satisfied consumers become. While the basic congruity mechanism is

universal, the relative impact of the different congruity facets (i.e., self-image related, utilitarian, economic, hedonic, moral) can vary across products/services, rendering the model broadly applicable and allowing comparisons both within as well as across different products/services and levels of aggregation (such as, for instance, product level, brand level, company level, industry sector level, and group/society level). Besides customer satisfaction, congruity models do predict a broad range of post-consumption constructs, such as attitudes, intentions, and actual behavior (Rodriguez, Bosnjak, & Sirgy, 2012).

Consequences of Customer Satisfaction

Typical outcomes of customer satisfaction investigated in past studies have been complaining behavior, positive versus negative word of mouth, and product/service loyalty. In their meta-analysis, Szymanski and Henard (2001) found that customer satisfaction is most strongly correlated with word-of-mouth effects, followed by loyalty (operationalized here as repeated purchasing). The smallest effect found was on complaining behavior.

Recent research on the effects of customer satisfaction has focused on variables of direct managerial relevance and has explored nonlinear effects. For instance, Homburg, Koschate, and Hoyer (2005) found a strong effect of customer satisfaction on customers' willingness to pay a price premium. The relationship was found to be inverse S-shaped, meaning that the tails of the (dis)satisfaction continuum were more strongly tied to customers' (non-)willingness to pay a price premium than the (dis)satisfaction dimensions' midpoint spectrum.

Customer satisfaction is regarded as a key determinant and mediator in various consumer ► well-being and consumption life-cycle models.

On a microeconomic level, customer satisfaction was found to be positively related to a broad range of performance indicators such as, for instance, company profitability (Anderson, Fornell, & Lehmann, 1994), cash flow (Gruca & Rego, 2005), and market value of equity (Fornell, Mithas, Morgeson, & Krishnan, 2006). On macroeconomic levels, customer satisfaction is a predictor for gross domestic product (GDP) growth and personal consumption expenditure (PCE) growth (Fornell, Rust, & Dekimpe, 2010) and therefore related to economic well-being.

Measurement of Customer Satisfaction

Three generic approaches to measure customer satisfaction have been proposed, namely, (1) overall or global satisfaction scales, (2) attribute-based formative measures, and (3) attribute-based reflective measures.

Overall or global satisfaction is usually measured with one or more items capturing the degree of being satisfied versus dissatisfied in general with a product/service on a five-point (► Likert-type), seven-point (including polarity profile types), or ten-point response scale (Farris, Bendle, Pfeifer, & Reibstein, 2010).

Most national customer satisfaction indices developed since the 1990s to assess customer satisfaction both within as well as across various industries do belong to the group of global measures. For instance, the American Customer Satisfaction Index (ACSI; http://www.theacsi.org/) encompasses the following three 10-point items: overall satisfaction (ranging from *very dissatisfied* to *very satisfied*), overall expectancy disconfirmation (ranging from *falls short of your expectations* to *exceeds your expectations*), and overall comparison to an ideal (*not very close to the ideal* thru *very close to the ideal*).

While overall satisfaction measures are parsimonious and easy to use, they largely lack information on how the satisfaction judgment has been formed.

Customers might use different attributes and diverse integration and weighting procedures to form a satisfaction judgment as being addressed by *attribute-based formative measures of customer satisfaction*. Relevant attributes can be derived inductively and separate for each product/service of interest or by using a heuristic framework classifying attributes according to

their differential impact on customer satisfaction judgments. One example of such a heuristic framework having direct implications for product/service design is the Kano model (Kano, Seraku, Takahashi, & Tsuji, 1984). In its most generic form, the procedure of measuring customer satisfaction using a Kano-type approach begins with eliciting three sets of satisfaction-generating attributes:

1. Basic attributes, i.e., those who are expected, assumed, and taken for granted
2. Performance attributes, i.e., expectations that are at the top of customers' minds and can therefore be expressed
3. Excitement attributes, such as unexpected innovations delivering *buzz* or features pleasantly differentiating the product/service from its competitors

After having extracted attributes, products/services are being rated according to the degree to which they fulfill consumers' needs on basic/performance/excitement attributes. The individual fulfillment assessments are then systematically integrated to formatively design a customer satisfaction score. The rationale of constructing customer satisfaction measures according to the Kano model is as follows: Basic attributes are believed to prevent dissatisfaction but cannot generate satisfaction. Accordingly, basic attributes feed into computing the degree of dissatisfaction only. Performance attributes are presumed to be linearly related to the degree of (dis)satisfaction and serve as formative indicators for estimating (dis)satisfaction across the full range of the satisfaction/dissatisfaction latent dimension. Finally, excitement attributes serve as facilitators of satisfaction; they feed into computing the degree of satisfaction only.

The objective of *attribute-based reflective measurement* approaches is to capture all manifestations of an underlying continuum model of satisfaction responses and does encompass both cognitive as well as affective responses. One example belonging to this third class of operationalizations is the 12-item consumption satisfaction scale (CSS) by Oliver (2010, p. 378).

Discussion

The customer satisfaction construct has proved its value as an antecedent of a number of consumption-related constructs and will therefore most likely remain a crucial concept in business-related and economic disciplines. To fully understand its operation, integration into a universal *theory of consumption* appears desirable. Furthermore, nonlinear relationships between customer satisfaction and its consequences seem a promising avenue for future research. When operationalizing customer satisfaction, the match between the conceptual definition used and the measurement approach should be scrutinized.

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CWB

► Consumer Well-Being

CWBI

► Aboriginal Community Well-Being Index

CWI

► Child and Youth Well-Being Index (CWI)
► Community Well-being Index

Cyclothymic Disorder

► Mood Disorders and Sexuality