

Social Exclusion and Quality of Life: An Empirical Study from Turkey

Nuran Bayram · Firat Bilgel · Nazan Gonul Bilgel

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Abstract We examine the perception of social exclusion and quality of life and their interactions among a group of Turkish citizens. For this purpose we used the social exclusion scale developed by Jehoel-Gijsbers and Vrooman and the WHOQOL-BREF scale. The study group consists of 2,493 participants who are residents of a city in Turkey. Our study was based on self reporting and voluntary participation. We used SEM (Structural Equation Modeling) for the analysis. We observed significant paths among several dimensions of quality of life and social exclusion. We found that the material deprivation dimension of social exclusion has a direct and negative impact on the environment and social relationships domains of quality of life. The material deprivation dimension explains 36% of the variation in the environment and 16% of the variation in social relationship domains of quality of life. This finding indicates that the material deprivation and social participation play an important role in the perception of environmental and psychological life quality. Physical health, social relationships, and environmental domains of life quality are important in the social participation dimension of perceived social exclusion.

Keywords Quality of life · Social exclusion · WHOQOL-BREF

N. Bayram
Department of Econometrics, Faculty of Economics and Administrative Sciences, Uludag University,
Bursa, Turkey
e-mail: nuranb@uludag.edu.tr

F. Bilgel
Department of Economics, University of Bologna, Bologna, Italy
e-mail: firat.bilgel@unibo.it

N. G. Bilgel (✉)
Faculty of Medicine, Uludag University, Bursa, Turkey
e-mail: nuranb@uludag.edu.tr

1 Introduction

In Europe, the elimination social exclusion has become an important goal of social and economic policy. The European Union (EU) defined social exclusion as a process whereby certain individuals are pushed to the edge of society and prevented from participating fully by virtue of their poverty, by lack of basic competencies and lifelong learning opportunities, or as a result of discrimination (Eurostat 2010). This distances them from job, income, and education opportunities as well as social and community networks and activities. They have little access to power and decision-making bodies and thus often feel powerless and unable control the decisions that affect their day to day lives. According to Burchardt (2000) an individual is socially excluded if he or she does not participate to a reasonable degree over time in certain activities of his or her society, and (a) this is for reasons beyond his or her control, and (b) he or she would like to participate.

Atkinson et al. (2002), Sen (2000), and Tsakloglou and Papadopoulos (2002) suggest a consensus over the following key elements of social exclusion:

1. Multidimensional implies deprivation in a wide range of indicators of living standards caused by not only a lack of personal resources but also insufficient or unsatisfactory community resources.
2. Dynamic implies that people are excluded not only because of their current situation but also because they have little prospect for the future.
3. Relativity implies that social exclusion occurs in a particular society at a particular point in time.
4. Agency recognition implies that social exclusion lies beyond the narrow responsibility of the individual.
5. Being relational implies a major discontinuity in the relationship of the individual with the rest of the society, inadequate social participation, lack of social integration, and lack of power.

Social exclusion occurs when different factors combine to trap individuals and areas in a spiral of disadvantage. Income, access to quality health facilities, education, housing, and quality of the local environment are some of the factors that affect people's well-being. The causal aspects of social exclusion are linked to denial of, or restriction of access to, resource structures necessary for social belonging, including non-material resources such as trust and the interpersonal respect needed for self-esteem, both individually and collectively. In all its manifestations, social exclusion is of central importance to quality of life (Phillips 2006).

Quality of life has many definitions. The World Health Organization (WHO) conceptualized quality of life in cross-cultural terms as, "Individuals' perception 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. It is a broad-ranging concept incorporating in a complex way by the person's physical health, psychological state, level of independence, social relationships and their relationship to salient features of the environment." (WHOQOL Group 1995).

Social exclusion and quality of life are multidimensional and dynamic concepts. Both of them are produced by two types of forces: endogenous and exogenous. Endogenous forces of quality of life include mental, emotional, and physiological responses of the individual to its life condition. Exogenous forces include social structure and cultural and psychological influences of the social environment (Ferriss 2006). Endogenous forces of social exclusion are social participation and cultural/normative integration, whereas exogenous

forces are material deprivation and access to social institutions, provisions, and good housing. Social exclusion and quality of life can be measured both objectively and subjectively. Furthermore, there is an interaction between social exclusion and quality of life: social exclusion can diminish the quality of life and vice versa. For example, in a study by Skevington (2009), the opportunity to work was found to be central in relieving poverty, with wide spread implications for a better quality of life. The same study revealed that fair treatment, equality, and equity added significantly to the quality of life and a well-governed society was vital to a good quality of life. All these issues that affect the perception of quality of life are also components of social exclusion.

During the last two decades, Turkey has experienced considerable economic and social development. The gross national product has increased, the average level of education has improved, accessibility to healthcare services has improved, housing and working conditions have seen a dramatic change, and social security now covers most of the population. There has also been a remarkable improvement in the health of the country; for example, infant and maternal mortality rates have decreased, life expectancy has increased, certain infectious diseases have been eliminated altogether, and immunization ratios have risen. Despite these improvements, some issues related to social exclusion persist, hampering the quality of life.

In this study, we evaluate the perception of social exclusion and quality of life and their interactions among a group of Turkish citizens.

2 Survey Methodology

2.1 Location

This study was performed in the fourth-largest city of the country, Bursa, with several local municipalities, which are connected to that of the metropolitan city. There are a total of 172 neighborhoods within the boundaries of the metropolitan city municipality. Bursa is an ancient city, located on the historical Silk Road, and was the first capital of the Ottoman Empire. Bursa has always been an in-migration city throughout its history. During the late periods of the Ottoman Empire, its urban population increased rapidly with aggressive migration by Balkans and Caucasians. After the 1960s, the city became a center for the automobile and textile industries, which accelerated internal migration from the north-eastern and eastern parts of the country. In 1991, Bursa was awarded the Europe Prize by the European Council for being especially successful in promoting the European ideal, and in 2000, Bursa was accepted into Phase III of the World Health Organization's Healthy Cities project, and was the first city in Turkey to become a member of this project.

2.2 Study Participants

The participants were chosen from registry cards of the city's health centers, which are updated annually. We considered the different districts of the city as different strata and used a stratified sampling method; the number of residents in each stratum was proportionally distributed. We calculated the sample size as 1847 residents, with a sampling error of 3% and a confidence interval of 99%. During this selection process, residents under 18 and over 80 years were excluded. We selected more participants and then re-calculated the sample size in order to compensate the residents who did not want to participate or were unable to reach at their homes. Finally, we selected 3,000 names from the registry cards of

146 health centers. Thirty university students were selected and trained for the distribution of questionnaires to the participants at their homes. They explained the purpose of the study and sought the participants' consent. Consenting participants were given instructions for filling the questionnaire along with a return date (usually 7 days after distribution). The university students helped illiterate participants by reading out the questions and marking the answers. All participants were asked to not disclose their identities on the questionnaires.

Of the 3,000 questionnaires distributed, 2,753 were returned. Among them, 260 contained missing data and were excluded from the analyses. Finally, we analyzed data obtained from 2,493 individuals.

2.3 Instruments

We used the social exclusion scale developed by Jehoel-Gijsbers and Vrooman (2007) and the WHOQOL-BREF scale (WHOQOL Group 1994, 1995, 1998), together with a questionnaire about socio-demographic characteristics.

The social exclusion scale had not been used in the Turkish language before. It was therefore back-translated by two English language teachers, one native English speaker with good Turkish language skills and the other a native Turkish speaker with good English language skills. A pilot study with the Turkish version of the scale was performed on 50 volunteer university students in order to check for any discrepancies and misunderstandings. We found no discrepancies or misunderstandings in the Turkish version of the scale, and considered it fit to measure social exclusion.

The social exclusion scale consists of four dimensions: material deprivation, obtaining social rights, social participation, and cultural integration. The dimension of obtaining social rights has been considered in two separate sub-dimensions. While the first sub-dimension includes being able to benefit from public institutions and receive aid in terms of social rights, the second sub-dimension consists of being able to benefit from a suitable house and a secure environment (Table 1). For each of these dimensions, responses were provided on a 5-point Likert-type scale, where (1) signifies "never" and (5), "always." Higher scores represent higher levels of social exclusion. The internal consistency of the Turkish version of the social exclusion scale was found to be 0.85 in general and varied between 0.67 and 0.82 for the dimensions.

The WHOQOL-BREF scale was previously translated and validated for the Turkish language (Eser et al. 1999) and used in that form. The Turkish version of this scale is similar to the original and contains four domains and a total of 26 questions related to physical health, psychological state, social relationships, and the environment (Table 2). The responses were provided on a 5-point Likert-type scale from 1 (not at all; never; very poor or very dissatisfied) to 5 (completely; very good, always; extremely or very satisfied). The scale can be scored on a total score of 20 or 100 and higher scores represent a higher level of life quality.

3 Statistical Methodology

We used structural equation modeling (SEM) for analyzing the data in virtue of its ability to distinguish between indirect and direct relationships between variables and to specify structural relations among latent variables. SEM also allows researchers the flexibility of modeling data structures that violate traditional model assumptions, such as heterogeneous

Table 1 Dimensions of social exclusion scale

| Social exclusion scale dimensions | Never (1) | Always (5) |
|---|-----------|------------|
| Dimension 1: material deprivation | | |
| Payment of fixed expenditures is very hard (MD1) | | |
| Has arrears of payment (MD2) | | |
| Worries often/continuously about financial situation (MD3) | | |
| Finds it more difficult to make ends meet than 2 years ago (MD4) | | |
| Lacks consumer durables due to financial deficits (MD5) | | |
| Cannot afford basic expenditures (MD6) | | |
| Club membership is too expensive (MD7) | | |
| Has difficulties in obtaining a loan (MD8) | | |
| Dimension 2a: social rights: access to institutions and provisions | | |
| Is often treated badly by public agencies (SRA1) | | |
| Often faces long waiting periods for appointments/treatments at public agencies (SRA2) | | |
| Often experiences problems with public agencies (SRA3) | | |
| Denied commercial service (e.g. banks, insurance companies etc.) (SRA4) | | |
| Benefit (according to respondent) wrongfully refused or terminated (SRA5) | | |
| Dimension 2b: social rights: access to adequate housing and safe environment | | |
| Frequent disturbances in the neighborhood (SRB1) | | |
| Wants to move to a house within 2 years (SRB2) | | |
| Had/expects a long search period in finding a new house (SRB3) | | |
| Little social cohesion in neighborhood (SRB4) | | |
| Feels unsafe in neighborhood (SRB5) | | |
| Feels unsafe if one is home alone (SRB6) | | |
| Noisy neighborhood (SRB7) | | |
| Dirty neighborhood (SRB8) | | |
| Dimension 3: social participation | | |
| Feels left out of society (SP1) | | |
| Does not/hardly go out for amusement (SP2) | | |
| Experiences lack of social contacts (SP3) | | |
| No/little diversity in social contacts (SP4) | | |
| Like to spend some time with friends (SP5) | | |
| Has no/very few people to discuss intimate matters (SP6) | | |
| Has little social support (SP7) | | |
| Trouble in relationships (SP8) | | |
| Social contacts hampered by health (SP9) | | |
| Dimension 4: Cultural/normative integration | | |
| A false testimony is allowed if a friend faces trial (NI1) | | |
| Breaching the law is not a problem as long as one does not get caught (NI2) | | |
| Acceptance of paid second job (NI3) | | |
| Acceptance of paid job of those who received money for unemployment or social fund (NI4) | | |
| Acceptance of the usage of others' health or insurance documents in order to being examined or treated free of charge (NI5) | | |

Table 2 Domains of WHOQOL-BREF Scale

| Domains | | Facets | |
|----------|----------------------|--------|--|
| Domain 1 | Physical health | QL3 | Physical pain |
| | | QL4 | Need for medical treatment |
| | | QL10 | Energy for everyday life |
| | | QL15 | Able to get around |
| | | QL16 | Satisfaction with sleep |
| | | QL17 | Ability to perform daily living activities |
| | | QL18 | Satisfaction with work capacity |
| | | QL5 | Enjoy of life |
| Domain 2 | Psychological | QL6 | Feeling of a meaningful life |
| | | QL7 | Able to concentrate |
| | | QL11 | Acceptance of bodily appearance |
| | | QL19 | Satisfaction with him/herself |
| | | QL26 | Having negative feelings |
| | | QL20 | Satisfaction with personal relationships |
| Domain 3 | Social relationships | QL21 | Satisfaction with sex life |
| | | QL22 | Satisfaction with the support of friends |
| | | QL8 | Feeling safe in daily life |
| Domain 4 | Environment | QL9 | Healthy physical environment |
| | | QL12 | Having enough money for basic needs |
| | | QL13 | Availability of information for daily life |
| | | QL14 | Opportunity for leisure activities |
| | | QL23 | Satisfaction with the conditions of living place |
| | | QL24 | Satisfaction with access to health services |
| | | QL25 | Satisfaction with the transportation |

error variances and correlated errors. However, the application of SEM models is often complex in practice, and it requires both theory and data considerations to drive the decision-making in its development and validation. Judgment is required throughout the process, and a strong background in the content area and the causal hypothesis framework by the investigators is important. Particularly controversial areas are the testing of the model fit and the iterative model re-specification. For example, non-convergence of parameter estimation is not uncommon because often there are many parameters and relatively limited sample sizes. The sample size should not be very small as SEM relies on tests that are sensitive to sample size as well as to the magnitude of differences in covariance matrices. Compared to regression and factor analysis, SEM analysis is a relatively young field, with its roots in papers appearing only in the late 1960s. Although its use has increased in recent years, especially in the fields of social science, education, business, medicine, and biological science (Schumacker and Lomax 2004), the methodology has limitations and is still considered to be “under construction” (Kline 2005). The adequacy of the model is assessed by (1) root mean square error of approximation (RMSEA), which should be below 0.05 for a good fit; (2) goodness of fit index (GFI), which shows the amount of variance and covariance explained by the model and should be greater than 0.90 for an adequate fit of the model; and (3) comparative fit index (CFI),

Table 3 Models and fit indices of SEM analyses

| No. | Paths | χ^2 | df | χ^2/df | GFI | CFI | RMSEA |
|-----|--|------------|-------|-------------|-----|-----|-------|
| 1 | Psychological ← material deprivation Social relationship ← material deprivation | 6,535.397 | 147 | 44.46 | .86 | .81 | .13 |
| 2 | Material deprivation ← psychological Material deprivation ← social relationship Material deprivation ← environment | 1,5529.087 | 346 | 44.88 | .79 | .71 | .13 |
| 3 | Psychological ← social rights (part A) Social Relationship ← social rights (part A) | 6,358.174 | 99 | 64.22 | .85 | .81 | .16 |
| 4 | Social rights (part A) ← psychological Social rights (part A) ← social relationship Social rights (part A) ← environment | 1,4534.036 | 295 | 49.27 | .79 | .73 | .14 |
| 5 | Physical health ← social rights (part B) Psychological ← social rights (part B) Social Relationship ← social rights (part B) Environment ← social rights (part B) | 2,3099.215 | 588 | 39.28 | .75 | .70 | .12 |
| 6 | Physical Health ← social participation Psychological ← social participation Social Relationship ← social participation Environment ← social participation | 2,2973.358 | 623 | 36.88 | .76 | .71 | .12 |
| 7 | Social Participation ← physical health Social participation ← psychological Social participation ← social relationship Social participation ← environment | 2,3553.593 | 623 | 37.81 | .74 | .70 | .12 |
| 8 | Normative integration ← psychological | 4,363.505 | 50 | 87.27 | .88 | .73 | .16 |
| 9 | Model with all paths | 5,8291.385 | 1,871 | 31.15 | .75 | .68 | .11 |
| 10 | Model only with significant paths | 9,540.185 | 1,170 | 8.15 | .94 | .96 | .04 |

Refer Tables 1 and 2 for the abbreviations

which should also be greater than 0.90 for adequate fitness. For statistical analysis, we used SPSS for Windows version 17.0 and AMOS 17.0 programs.

4 Results

In SEM analysis, the structural equations from the WHOQOL-BREF domains to the social rights (part B) domain showed no significance. Also the structural equations from the Cultural/Normative Integration domain to WHOQOL-BREF domains showed no significance. Therefore, instead of the ten models required for the SEM analysis, we built eight models (Table 3).

The ninth model contains all the paths whether significant or not and the tenth model contains only the significant paths. The best fitting model was the tenth model, as illustrated in Fig. 1.

Covariations between the error terms were allowed in this model. However, these are not shown in the figure, and arrows indicate hypothesized paths. The goodness of fit provided evidence that the hypothesized model was stable.

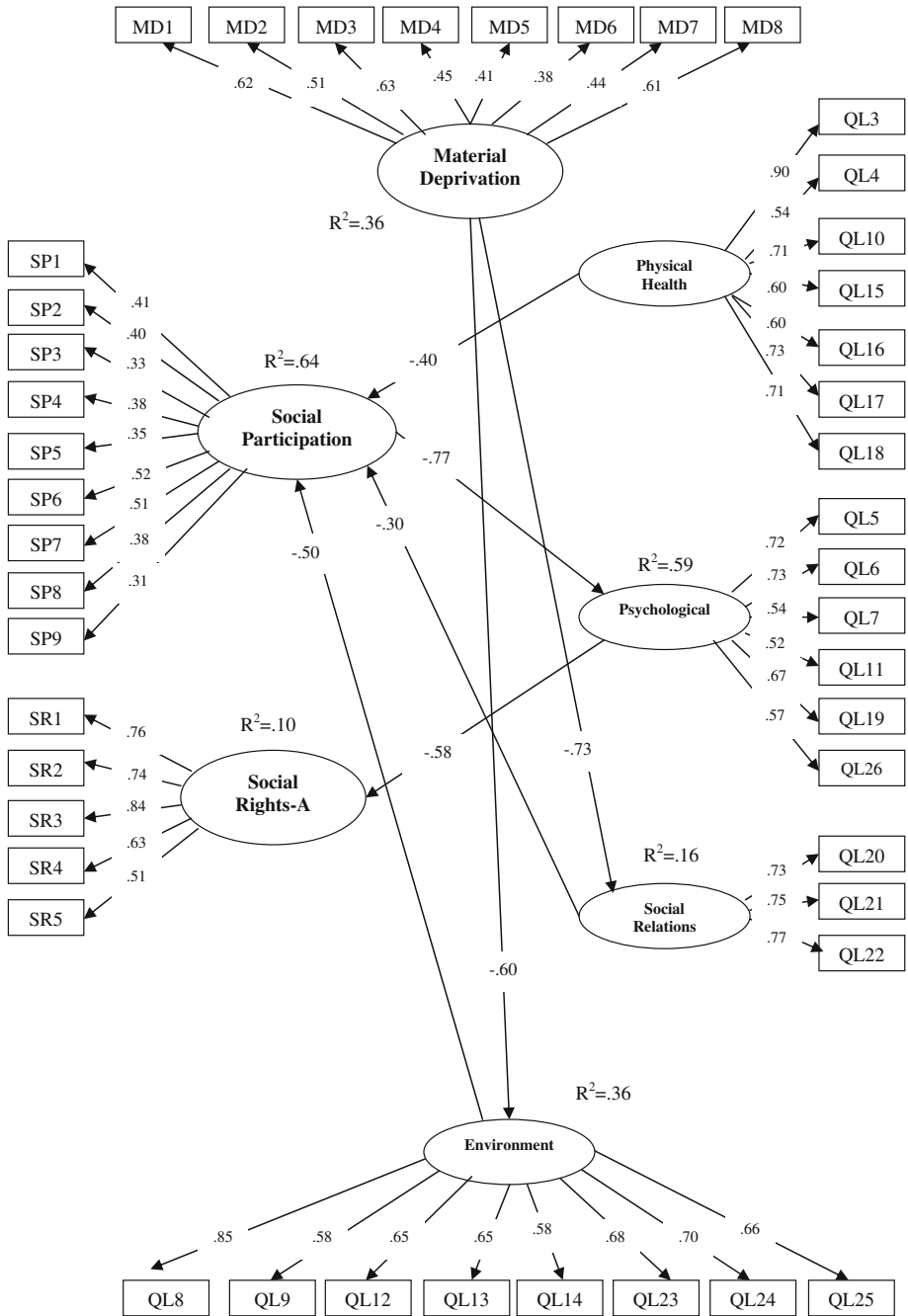


Fig. 1 The structural equation model (10th model) only with significant paths

The path coefficients are the standardized estimates of direct effects, which are interpreted as standardized regression coefficients. All estimated path coefficients were significant.

In terms of the physical health domain of quality of life, the most important variables were pain (QL3), energy for everyday life (QL10), daily living activities (QL17), and work capacity (QL18). The correlation coefficients of these variables were higher than the other variables in this domain and ranged from 0.71 to 0.90.

In terms of the psychological domain of quality of life, the most important variables were a meaningful life (QL6), enjoying life (QL5), and self satisfaction (QL19). The correlation coefficients of these variables were higher than the other variables in this domain and ranged from 0.67 to 0.73.

In terms of the environment domain of quality of life, the most important variables were feeling safe (QL8), access to health services (QL24), and satisfaction with conditions of living place (QL23). The correlation coefficients of these variables were higher than the other variables included in this domain and ranged from 0.68 to 0.85.

For the material deprivation dimension of social exclusion, payment of fixed expenditures (MD1), worry about financial situation (MD3), and difficulties in obtaining a loan (MD8) were the most important variables. The correlation coefficients of these variables were 0.62, 0.63, and 0.61, respectively.

For the social participation dimension of social exclusion, having no/few people to discuss intimate matters (SP6) and little social support (SP7) were the most important observed variables. The correlation coefficients of these variables were 0.52 and 0.51, respectively.

Problems with public agencies (SRA3), treated badly by public agencies (SRA1), and long waiting periods at public agencies (SRA2) were the most important variables in the social rights access to institutions and provisions dimension of social exclusion with correlation coefficients of 0.84, 0.76, and 0.74, respectively.

Physical health, social relationships, and environment domains of quality of life have direct effects on social participation and these three domains explained 64% of the variation in the social participation dimension of social exclusion. Good physical health, good social relationships, and good environmental conditions diminished lack of social participation. Lack of social participation directly affects the psychological domain of quality of health and this effect is negative. This implies that lack of social participation diminishes psychological well-being.

In our model, the material deprivation dimension of social exclusion has affected the environment and social relationships domains of quality of life directly and negatively. This implies that people with material deprivation do not have good social relationships and they are living in unfavorable environmental conditions. Material deprivation also affects the social participation dimension of social exclusion indirectly by affecting social relationships. About 10% of the variation in the social rights dimension of social exclusion can be explained by the direct effects of the psychological domain of quality of life and by the indirect effects of social participation through the psychological domain. Fifty-nine percent of the variation in the psychological domain of quality of life can be explained by the direct effects of the social participation dimension of social exclusion. The material deprivation dimension can explain 36% of the variation in the environment and 16% of the variation in the social relationship domains of quality of life.

5 Discussion

In this study, we assessed the interactions between two multidimensional concepts: quality of life and social exclusion.

Assessment of quality of life can rely on objective conditions like living standards. These objective indicators are still preferred by economists who focus on material resources (Sirgy 1998) and by researchers in the medical field in relation to physical functioning (Kohler et al. 2005). Objective perspectives define quality of life solely in terms of its observability and exclude many subjective aspects that are internal and invisible and can be meaningful to the person concerned. Objective perspectives have therefore resulted in a narrow concept where quality of life is defined solely in terms of its observability (Skevington 2009). We used the WHOQOL-BREF measurement, which gave us the opportunity to assess the subjective aspects of quality of life and has a proven cross-cultural value (WHOQOL Group 1994, 1995, 1998).

Similar to quality of life, the assessment of social exclusion can rely both on objective and subjective conditions. Measuring social exclusion in an objective manner can be done by evaluating the level of material deprivation, housing conditions, number of friends, access to public services, etc. Relying solely on objective criteria for measuring social exclusion can be inappropriate because internal, invisible, and subjective aspects of social exclusion can be meaningful to the person concerned. A person who has been considered objectively as socially excluded need not consider himself so and vice versa. Therefore, the perception of social exclusion involving a subjective evaluation of this concept has gained more attention. We used the social exclusion scale developed by Jehoel-Gijsbers and Vrooman (2007), which evaluates social exclusion through the views of the respondents. We observed significant paths among several dimensions of quality of life and social exclusion.

Paths which are directed from the concerned dimension of social exclusion to the quality of life domains were between the material deprivation and environment domains, material deprivation and social relationships domains, and the social participation and social relationships domains. All of these paths carried negative signs. Therefore, material deprivation may have diminished the perception of environmental quality of life in terms of living in a safe and healthy physical environment and having enough money and access to daily information, leisure activities, health services, and transportation. About 36% of environmental quality of life perceptions were related to material deprivation.

Material deprivation may have also diminished the quality of life through the social relations domain by affecting personal relationships, satisfaction of sex life, and support received from friends. About 16% of the social relationships' quality of life perceptions were related to material deprivation. The effects of poverty on well-being and life quality have been well studied. People who live in poverty appear to suffer from a lower sense of well-being than those who do not (Biswas-Diener and Diener 2001). However, a small body of literature suggests that certain communities and cultures, although poor, enjoy a relatively high level of quality of life, including subjective well-being (Diener and Diener 1995).

The absence of social participation may have diminished the psychological aspect of quality of life in terms of enjoying life, having a meaningful life, being able to concentrate, satisfaction with appearance, satisfaction with oneself, and having negative feelings. About 59% of the psychological quality of life perceptions were related to the absence of social participation.

Paths that are directed from the concerned domain of life quality to the social exclusion dimensions were between physical health and absence of social participation; social relationships and absence of social participation; environment and absence of social participation; and psychological domain and absence of social rights (institutions and provisions). All of these paths carried negative signs. Therefore, a higher quality of life in terms of physical health, social relationships, and/or environmental quality of life may decrease the perception of social exclusion related to lack of social participation. About 64% of social participation related social exclusion perception corresponded to physical, psychological, and environmental life quality. Studies among people with chronic pain and illnesses showed that participants felt rejected by those who are close to them and had to reevaluate friendship, trust and love. (Åsbring and Narvanen 2002; Dickson et al. 2007; Henriksson 1995; Jason et al. 2002; Kohler et al. 2005; Schmitz and Crystal 2000). They felt let down by those closest to them at a time when they most needed support. This often led to feelings of isolation.

Psychological quality of life affects the perception of social exclusion in another way. Access to institutions and provisions and higher values may diminish perceived social exclusion by decreasing the perception of the absence of social rights, but its magnitude is relatively small.

Material deprivation plays an important role in the perception of environmental life quality. Social participation is important in the perception of psychological life quality. Physical health, social relationships, and environmental domains of life quality are important in the social participation dimension of perceived social exclusion.

Finally, some limitations of our study are in order. Firstly, our data depend on self-reporting and may have been the cause of recall bias and under-reporting. Secondly, we used cross-sectional data and therefore two-way causal effects cannot be estimated. Detailed longitudinal data are needed to create enough time distance between causes and consequences. Thirdly, we did not take ethnicity and religious beliefs into account, which may have some impact on feelings of social exclusion.

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References

- Åsbring, P., & Narvanen, A.-L. (2002). Women's experiences of stigma in relation to chronic fatigue syndrome and fibromyalgia. *Qualitative Health Research*, *12*, 148–160.
- Atkinson, T., Cantillon, B., Marlier, E., & Nolan, B. (2002). *Social indicators. The EU and social inclusion*. Oxford: Oxford University Press.
- Biswas-Diener, R., & Diener, E. (2001). Making the best of a bad situation: Satisfaction in the slums of Calcutta. *Social Indicators Research*, *55*, 329–352.
- Burchardt, T. (2000). Social exclusion: concepts and evidence. In D. Gordon & P. Townsend (Eds.), *Breadline Europe: The measurement of poverty* (pp. 385–406). Bristol: The Policy Press.
- Dickson, A., Knussen, C., & Flowers, P. (2007). Stigma and the delegitimation experience: An interpretative phenomenological analysis of people living with chronic fatigue syndrome. *Psychology & Health*, *22*(7), 851–867.
- Diener, E., & Diener, C. (1995). The wealth of nations revisited: Income and quality of life. *Social Indicators Research*, *36*, 275–286.
- Eser, E., Fidaner, H., Fidaner, C., Yalcin, S. E., Elbi, H., & Goker, E. (1999). WHOQOL-100 ve WHOQOL-BREF'in psikometrik özellikleri. *3 P (Psikiyatri, Psikoloji, Psikofarmakoloji) Dergisi*, *7*(supp. 2), 23–40. The psychometric properties of WHOQOL-100 and WHOQOL-BREF. *3P (Psychiatry, psychology, psychopharmacology) Journal*, *7*(supp. 2), 23–40.

- Eurostat. (2010). *Combating poverty and social exclusion*. Luxembourg: Publications Office of the European Union.
- Ferriss, A. L. (2006). A theory of social structure and the quality of life. *Applied Research in Quality of Life*, 1, 117–123.
- Henriksson, C. (1995). Living with continuous muscle pain-patient perspectives: Part I. Encounters and consequences. *Scandinavian Journal of Caring Science*, 9, 67–76.
- Jason, L., Taylor, R. R., Plioplys, S., Stepanek, Z., & Shlaes, J. (2002). Evaluating attributions for an illness based upon the name: Chronic fatigue syndrome, myalgic encephalomyelitis and Florence Nightingale disease. *American Journal of Community Psychology*, 30, 133–148.
- Jehoel-Gijsbers, G., & Vrooman, C. (2007). *Explaining social exclusion: A theoretical model tested in the Netherlands*. The Hague: The Netherlands Institute for Social Research.
- Kline, B. R. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York: The Guilford Press.
- Kohler, M., Clarenbach, C. F., Böni, L., Brack, T., Russi, E. W., & Bloch, K. E. (2005). Quality of life, physical disability, and respiratory impairment in Duchenne muscular dystrophy. *American Journal of Respiratory and Critical Care Medicine*, 172, 1032–1036.
- Phillips, D. (2006). *Quality of life: concept, policy and practice*. Routledge: Abingdon.
- Schmitz, M. F., & Crystal, S. (2000). Social relations, coping, and psychological distress among persons with HIV/AIDS. *Journal of Applied Social Psychology*, 30, 665–685.
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling* (2nd ed.). New Jersey: Lawrence Erlbaum Associates Publishers.
- Sen, A. (2000). *Social exclusion: Concept, application and scrutiny*. Social Development Papers No: 1. Office of Environment and Social Development. Asian Development Bank.
- Sirgy, J. (1998). Materialism and quality of life. *Social Indicators Research*, 43, 227–260.
- Skevington, S. M. (2009). Conceptualising dimensions of quality of life in poverty. *Journal of Community & Applied Social Psychology*, 19, 33–50.
- Tsakoglou, P., & Papadopoulos, F. (2002). Aggregate level and determining factors of social exclusion in twelve European countries. *Journal of European Social Policy*, 12(3), 211–225.
- WHOQOL-Group. (1994). Development of the WHOQOL: Rationale and current status. *International Journal of Mental Health*, 23(3), 24–56.
- WHOQOL-Group. (1995). The World Health Organisation Quality of Life Assessment (WHOQOL): Position paper from the World Health Organisation. *Social Science and Medicine*, 41(10), 1403–1409.
- WHOQOL-Group. (1998). The World Health Organisation quality of life assessment. *Social Science and Medicine*, 46(12), 1569–1585.