

Aligning Perspectives on Health, Safety and Well-Being

Jukka Vuori
Roland Blonk
Richard H. Price *Editors*

Sustainable Working Lives

Managing Work Transitions and
Health throughout the Life Course

 Springer

Aligning Perspectives on Health, Safety and Well-Being

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Preface

The purpose of this volume is to describe the impact of current changing labour markets on individual work life trajectories and health. We focus on the most critical career transitions during life course: the school to work transition, job loss and re-employment and retirement, especially early retirement due to disabilities.

The starting idea for this book dates back to September 2011, during the Fourth International Conference on Unemployment, Job Insecurity and Health in Espoo, Finland. The ICOH (International Commission on Occupational Health) Scientific Committee that organized the conference decided to invite additional key scientists in addition to the keynote speakers of the conference to become chapter authors for this volume. Since the main theme of the conference focused on work and career related interventions, it also became a main focus of this book.

Many chapters in the volume offer concrete examples of ways to promote sustainable work careers. The interventions described by authors in this volume are examples of strategies for implementing support in schooling, improvements in employment contracts, increasing preparedness of individual employees with public education programs or developing work arrangements and support systems in work organizations and other service organizations.

The introductory section of the book illustrates three very distinct viewpoints on the dilemmas of current working life and its health consequences. In the first chapter, Richard Price presents a perspective on the employment challenges prevailing in developed economies by showing how they influence changing life trajectories. The second chapter by Simo Mannila describes the work-life challenges from the contrasting viewpoint of developing countries. Together these two features of the global economy have induced constant migration and greatly increased the numbers of low skilled workers in the developed world. These issues will also be addressed

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later in the book together with the challenges related to job loss and unemployment. The third chapter in the introduction by Guy Ahonen offers still another different economic perspective on work careers and health. In both developed economies as well as in less developed countries, individual work careers can be seen as valuable economic resources and preventive activities in the workplace can be seen as profitable economic investments.

The second part of the book deals with young workers starting their work careers and contains three chapters. The chapter by Katariina Salmela-Aro and Jukka Vuori describes students' preparation for working life and effects of a career intervention on their career and health. The chapter by Jos Akkermans and his colleagues discusses antecedents and consequences of the transition from school to work and how these are translated into effective interventions that facilitate this transition. The last chapter in this section by Bettina Wiese and Michaela Knecht deals with young workers' socialization into organizations and the challenge of balancing work with family life.

The topic of the third part of the book is job insecurity and consists of three chapters. Hans de Witte and his colleagues describe comprehensively earlier research in the area of job insecurity, health and well-being including recommendations for interventions. In a more theoretically oriented chapter, Kate Sweeny and Arezou Ghane offer principles for effective coping in uncertain work-related situations. Tomas Berglund concludes this section of the book by describing experiences with the so-called flexicurity model, which is a policy intervention with the aim of combining flexibility and security in the labor market.

Job loss and unemployment are central themes for the fourth section of the book. Amiram Vinokur and Richard Price have longstanding experience of intervention research and they describe a variety of ways to promote reemployment and mental health among the unemployed. The next chapter by Sanders and his colleagues also has a strong focus on preventive interventions, this time among the low-educated workers with the aim of increasing employability and with examples from the Netherlands. Alex Burdorf and Merel Schuring end this section with their chapter on poor health and disabilities as both causes and consequences of prolonged unemployment illustrating the complexity of the relationship between changes in health status and changes in work trajectories.

The last section of the book deals with early retirement and job retention. An intervention oriented chapter by Jukka Vuori and Salla Toppinen-Tanner demonstrates ways to enhance career management preparedness, job retention and mental health among senior employees. Next, yet another intervention oriented chapter by Mikko Härmä describes how older workers' job retention can be promoted by managing patterns of working hours. The last chapter by Gwenith Fisher and her colleagues survey the research on prolonged working years produced by increasing life expectancies, describes the consequences for health and well-being and suggests directions for interventions.

The contributors to this volume provide many promising recommendations for policies, practice and research that have the potential to greatly improve the health and life trajectories of workers in both the developed and the developing world. In a concluding chapter, we bring these suggestions together in the hope that they will be helpful to policy makers, practitioners and researchers in the field.

Helsinki, Finland
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About the Editors



Roland Blonk is Principal Scientist at TNO, one of the largest research centres for applied research in Europe. Further he is special professor at the Faculty of Social Sciences at the University of Utrecht. His main interest is *work as a means of recovery*. Applied to work related psychological complaints, his research resulted in state-of-the-art guidelines for the treatment of burnout and depression with a focus on integrated work resumption for occupational physicians, insurance physicians and clinical psychologists. More recently his work focussed on the sustainable employability of the unemployed and low skilled workers. He developed diagnostic instruments and short term

interventions that have been implemented on a national scale. Currently, in cooperation with the Dutch Ministry of Social Affairs, he is building regional solution focussed research programs that integrate the perspectives of the individual unemployed or low skilled worker, the employer, social welfare centres and governance. Roland Blonk has published a number of high impact scientific articles in the field of work and organizational psychology. He has served in many scientific advisory boards of companies and organisations, such as the Health Council, the Dutch Organisation for Scientific Research and Rotterdam Committee on Inclusive Economy. He is the secretary of the scientific committee “Unemployment, Job Insecurity and Health” of the International Commission of Occupational Health (ICOH).



Richard H. Price is Stanley E. Seashore Collegiate Professor of Psychology and Organizational Studies, Research Professor at the Institute for Social Research Emeritus. As Director of the **Michigan Prevention Research Center** at the Institute for Social Research, he and his colleagues conduct surveys and field experiments on organizational innovations aimed at improving the conditions of working life. The Center has been supported by the National Institutes of Health, the Carnegie Corporation of New York, the Joyce Foundation, and the California Wellness Foundation.

Price is a cofounder of **ICOS**, the Interdisciplinary Committee on Organizational Studies. Price was founding Director of the **Organizational Studies Program** at the University of Michigan and also founding Director of the **Barger Leadership Institute** at Michigan.

In 2010 Price received the American Psychological Foundation Gold Medal Award for Lifetime Achievement in the Application of Psychological Knowledge. Price has received the Distinguished Contribution Award from the Society for Research and Action, the Group Psychologist of the Year Award from the American Psychological Association, the International Research Award and the Prevention Science Award from the Society for Prevention Research and the Lila Roland Award for Prevention Research from the National Mental Health Association.

He is a Fellow of the American Psychological Association, the American Psychological Society, and the Society for the Psychological Study of Social Issues. He holds an honorary appointment as Professor of Psychology, Institute of Psychology, in the Chinese National Academy of Sciences.

Price has served on the Board of Trustees of the William T. Grant Foundation, and as an advisor to the Institute of Medicine, the National Institutes of Health, the Carnegie Corporation, and a number of foundations. He has also been an advisor to government agencies and corporations in a number of countries in Europe and Asia as well as in the United States.



Jukka Vuori is a Research Professor at the Finnish Institute of Occupational Health. His main interests are the sources and consequences of occupational stressors and coping during the major transitional phases of work life course, such as the school to work transition, job loss and re-employment, and the retirement transition. Recently, as depression and burnout are major causes of early retirement due to disability, he has increasingly worked on topics of career management and job retention. Vuori's research group has been involved in prevention research, large field experiments (RCT), implementation and country-wide dissemination of group interventions into service systems

for enhancing coping during these difficult occupational transition phases. His research group received first prize in the intervention study competition at the Work, Stress, and Health 2008 in Washington D.C. Professor Vuori has published extensively scientific articles, monographs and book chapters within the research area of work and organizational psychology. He has published various intervention method manuals and workbooks for wider dissemination in basic and vocational schools, employment service organizations, work organizations and enterprises. He has served in many scientific expert duties for the European Union, WHO and the Finnish government, and has been scientific advisor to various organizations in a number of countries in Europe, Australia and the Americas. He has chaired and been member in organizing committees of international congresses. He is the chair of the scientific committee "Unemployment, Job Insecurity and Health" of the International Commission of Occupational Health (ICOH).

Part I
Work Life Transitions and Health

Chapter 1

Changing Life Trajectories, Employment Challenges and Worker Health in Global Perspective

Richard H. Price

1.1 A Cascade of Global Changes

We are experiencing a cascade of global, economic, technological and political forces that are influencing the life course and health of workers all over the world (Pelfrene et al. 2003; Price et al. 1998). The globalization of work and economic transactions is providing economic mobility motivating populations to migrate to other countries (Castles et al. 2005). The movement of Asian workers to the Middle East and African workers to the European Union provides two examples. Firms once only operating within their own national borders now operate like small states by themselves, controlling vast economic resources as well as corporate cultures and attitudes toward work, health and the meaning of what constitutes the good life (Rifkin 1995; Price 2006; Price and Burgard 2008).

While these global forces are moving inexorably forward, the nature of jobs themselves is changing dramatically. The idea of a job, invented at the beginning of the Industrial Revolution (Bridges 1995), promised a regular number of hours of predictable work in exchange for a regular paycheck, and more recently health insurance, a pension and other benefits. That conception of what constitutes a “job” is now changing in dramatic ways.

Beginning after World War II but accelerating in the last decades of the twentieth century increasing amounts of organizational downsizing and technological change is producing layoffs and the emergence of nonstandard part time and contract work. Job insecurity is on the rise with resulting stress and increased economic uncertainty. The internet, emerging technologies, and the transformation of work itself with its movement from the manufacturing to the service sector in developed economies is changing the demands for skills making some workers redundant (Kalleberg 2000;

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Friedland and Price 2003). In the United States for example the Internet has eliminated traditional jobs and factories closed suddenly. Workers who had earned a solid living working with their hands found themselves out of work (Vinokur 1997) and with few job prospects.

At the same time, the shifting demographics of populations in some countries are producing changes of their own that influence work and health. In industrialized economies like the United States and Western Europe workforces are aging (Anderson and Hussey 2000). In Japan and other parts of the world an aging workforce was creating labor shortages in some sectors and placing economic demands on older workers that they often found it difficult to meet (Leibold and Voelpel 2007).

Macroeconomic changes in some countries have led to rapid changes in the job market. In Ireland a boom in banking and real estate made the country one of the great economic successes of Europe at the turn of the twenty-first century. But as the boom ended, suddenly Irish workers were out of a job wondering whether their jobs were ever going to return (Barry 2005). In China, with the rise of the market economy workers Chinese workers in state owned enterprises were laid off and forced to “leap into the sea” in search for work in a society where jobs used to be assigned by the government, but now suddenly were a prized resource (Price and Fang 2002; Price et al. 2006).

This bewildering series of changes requires that we understand how they influence the health and wellbeing of workers and their families (Quinlan et al. 2001; Sparks et al. 2001). There is a need for theory and empirical research to consider ways to suggest policy efforts to support the working life, careers and health of workers whose lives are affected by these transformations. New theory can provide more than simple insight. It can also provide ideas for more responsive programs and policies aimed at supporting workers and their families.

Changes in Working Life Influence Health Figure 1.1 describes how these technological, political and economic forces have begun to influence both national supports for work and how policies and practices have in turn influenced the work and well-being of individual workers and their families. The combined effect of all of these changes is also to influence the nature of work transitions that affect worker well-being and health. For example, in countries where older workers are retaining their jobs and job growth does not accommodate the entry of young workers the transition from school to work may be more difficult (O’Higgins 2001).

In still other situations rapid increases in job loss are influencing worker health and well-being in a variety of ways (Price et al. 2002; Vinokur 1997). As a consequence of economic downturns accompanying all this turbulence are demographic changes such as the entry of women into the workforce in western industrialized countries beginning in the 1960s (Price 2006). Changes in industries influence career changes for workers.

At the same time of many firms are beginning to discover that they can fragment traditional full-time jobs with health benefits and job security into part-time work without benefits (Kalleberg 2000). For example, full time jobs are now frequently

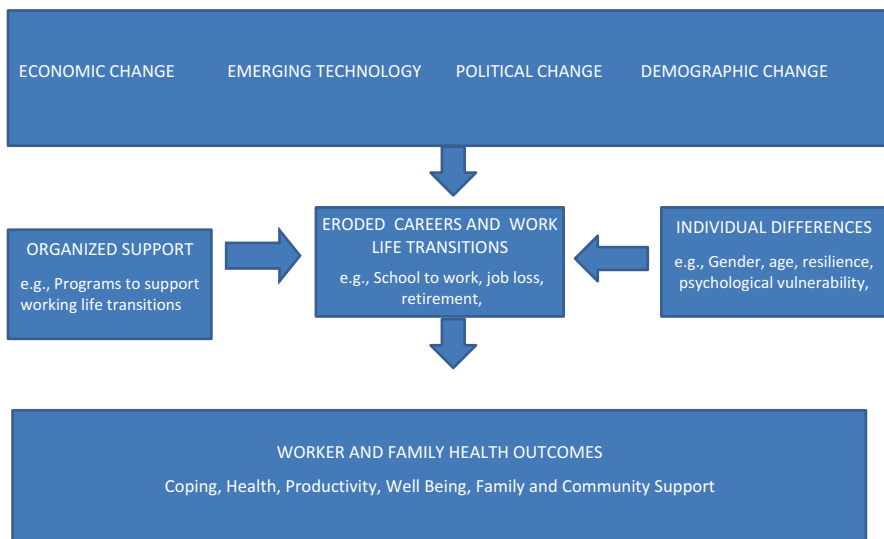


Fig. 1.1 Global changes, work life transitions and their impacts on work and health

made into “contingent work” where workers can be laid off at will. Some workers then must manage multiple part time jobs and stresses for individuals and their families as they juggle several jobs with changing schedules, disrupted family life and uncertain child care arrangements (Distler et al. 2005; Kivimäki et al. 2003).

Beyond all of these changes, the timing of retirement is changing from traditional age benchmarks to early retirement on the one hand or delayed retirement for those who either wish to or must continue work. How these transitions actually influence workers health and well-being depends not only on individual differences in gender, education, ethnicity, psychological resilience and social support, but also on how effectively a particular set of national policies has provided an organized support system for workers to deal with the work transitions they face (Benach et al. 2000).

In some cases training programs or programs for support of work transitions are available (Liu et al. 2014; Vinokur et al. 1995, 2000; Vuori et al. 2002, 2005, 2012; Vuori and Price 2006). The individual differences that people bring to a particular work transition and the organized social support that they can take advantage of all also have substantial effects on how individuals and families respond to the work transitions they face. At the individual level, coping demanded by changing jobs or by labor market search increase stress and create threats to health (Caplan et al. 1989; Dooley and Prause 2004).

Within families themselves, tasks that have traditionally been undertaken by particular family members must be redistributed to fit new circumstances at work and changes in roles also produce increased levels of stress and demands for effective coping (Geurts and Demerouti 2003). Within communities, plant closings or shifts

in economic resources produce changes in personal relationships and in some cases force migration. This complex and multilayered picture of economic and social change produces major challenges for policymakers and practitioners concerned with supporting the health and well-being of workers.

Three Pathways of Influence of Work on Health While there have been on a great many studies of how working life influences health, three major pathways can be identified that are areas of policy debate and have potential for program development (Price and Burgard 2008). First, the *physical environment* of the workplace can influence health in a number of different ways and has been a major starting place for much of the public health and policy development concerning worker health (Institute of Medicine, Panel on Musculoskeletal Disorders and the Workplace 2001).

The physical environment as it influences worker health is probably the most widely studied pathway and the most carefully regulated in most industrial societies (Venables 2013). Most industrialized countries have some form of governmental regulation that oversees the physical conditions of work to protect worker health. Policy standards to assure worker safety, to limit exposure to physical hazards and dangerous chemicals, are typical forms of regulation (Fleming 2001). But as some of the following chapters in this volume suggest, government agencies that attempt to effectively control these workplace hazards to health can be extremely variable in their effectiveness and in some developing countries still either function poorly or are entirely absent.

A second pathway, the *demanding nature of work activities and tasks* has been a major area of research and development. This approach to understanding the links between work and health most often involves understanding the nature of work stressors associated with either too little control over work or high levels of demand (Karasek and Theorell 1990). Both of these influences can have biological consequences as individuals respond to the stressful demands of work (Frankenheuser 1991; Kahn 1981; Taylor and Repetti 1997).

Job demands that influence worker health range from influences on such things as work shift changes that can influence circadian rhythms to repetitive high paced jobs, to jobs with high psychological demand that increase stress and in turn negatively influence health. Taylor and Repetti (1997), Kahn (1981) and Karasek and Theorell (1990) have shown that high levels of demand and low control are particularly likely to produce chronic stress and health problems. Taylor and Repetti (1997) have begun to describe the possible mechanism as for example, how anxiety and anger associated with poor working conditions can influence cardiac illness by influencing the sympathetic adrenal medullary system and the hypothalamic pituitary adrenocortical axis. McEwen (2002) has described the biological processes associated with coping demands such as these in detail.

While the demanding nature of the work tasks themselves confronting workers has clear influences on health and well-being, there is now compelling evidence that the social working environment can also produce powerful influences on health and well-being. For example, evidence is now growing rapidly to show the relationships between incivility and harassment in the workplace and subsequent health and well-

being (Cortina et al. 2001; Lim and Cortina 2005; Vartia 1996). At the same time, there is strong evidence making it clear that supportive relationships at work can moderate the health endangering influences of workplace stress resulting both from the demands of work itself and the sometimes stressful influences of relationships with coworkers (House et al. 1988; Johnson and Hall 1988; Kahn 1994). And while harassment and incivility can compromise health and well-being and social support may those same risks, there is also an emerging body of evidence suggesting that both stressful relationships and social support may be influenced by the larger organizational culture at work (Denison 1990; Wilson et al. 2004).

Most recently we have come to recognize a third pathway of importance in understanding the influences of working life on health. This pathway implicates the *contractual nature of jobs* (Rousseau 1995). Pioneering research on the health compromising influences of contractual work was conducted by Dwyer (1991). Later contributions have documented the influence on health and safety (Quinlan 1999) and how precarious employment arrangements can influence health and well-being (Bohle et al. 2004).

Here the focus is on the employment contract, either implicit or explicit, between employer and employee about the conditions of work including the availability of benefits such as health insurance and pensions as well as agreements about pay, full time versus part time work and finally, job security (Kalleberg 2000).

This third pathway between working conditions and health has come to be recognized as important because of the dramatically changing employment contract offered by employers to workers (Rousseau 1995). Over the last 30 years regular predictable and secure long term full time jobs with the expectation of regular increases in pay, available health and retirement benefits as a regular part of employment agreement has eroded dramatically especially in developed countries. What has replaced it is a new employment contract in which employers hire workers often on a part-time nonstandard basis, without the health benefits or other working benefits such as pensions and without any guarantee of job security.

The dramatic change in the nature of jobs that has resulted is influenced in part by the globalization of work and the deregulation of working conditions (Benavides et al. 2000). This change in the nature of the employment contract has produced greater uncertainty for workers and their families and new sources of stress quite different from the more familiar physical hazards and task demands that have previously been studied by researchers concerned with the links between employment and health (Institute of Medicine 2001).

Ironically improvements in technology to support more efficient and effective work have also reduced job security (Rifkin 1995). At the same time, reduction in union membership particularly in the United States has meant reduced benefits for workers in many countries (Bardasi and Francesconi 2004). Downsizing in the manufacturing sector as well as globalization and the “offshoring” of jobs has not only increased job insecurity but also increased also layoffs and increased the number of part-time, temporary and nonstandard jobs (Baumol et al. 2003; Vinokur et al. 1996; Kalleberg 2000).

We are only beginning to understand how these changes in the contractual nature of work accompanied by changes in health protective benefits has changed the health and well-being of workers (Ferrie et al. 2001; Kalleberg 2000; Rousseau 1995; Strandh and Nordlund 2008). Employee-employer relationships have changed from long-term in formal relationship oriented arrangements to shorter-term contract based relationships. While these contractual shifts in the nature of arrangements between employers and employees is much more dramatic in the United States than in some other countries, it appears that this shift in the contractual nature of work is changing in other industrialized countries as well (Virtanen et al. 2003). The impact of these changing contractual work relationships and their impact on health is even less well understood in emerging economies.

1.2 Taking a Life Course Perspective on the Changing Nature of Work and Health

While it is important to understand how hazardous physical exposure, changing work demands and changes in the terms of the employment contract all can “get under the skin” to produce health and mental health problems for workers, we also require an understanding of how these shifting conditions of work influence workers at different points in their lives and careers. The life course theoretical perspective (Elder 1995) is an approach to understanding the sustainability of careers and health over the life course that can help complete the picture.

The life course conceptual framework suggests that the life course is comprised of *multiple interdependent “careers”* including the work career, the family career, the health career, the volunteer career, and perhaps other aspects of life activity that unfold over time (Elder 1995). Because careers are both multiple and interdependent, they introduce considerable complexity into the way people encounter changes in their working life and how those changes influence health and well-being. For example, at certain points in life one kind of career may predominate such as work in midlife and may also intermingle in complex ways with the family career. A second key concept in the life course perspective is the idea of *life transitions*. Each of the work, family and health careers that we described is interrupted by a variety of life transitions (Elder and O’Rand 2002). Some of these transitions are expected and normative such as entering work for the first time and retirement. But others are unexpected such as involuntary job loss or unexpected illness.

These transitions are times of elevated health and psychological risks (Elder and O’Rand 2002). Because they are times of disruption and change they can trigger cascades of other life events and have the effect of disrupting the coping capacities of individuals and their families (Allen et al. 2000) as well as interfering with the flow of supportive resources needed to carry on life activities. For example, an unplanned transition such as job loss can produce losses in needed income, economic hardship, loss of access to health care, and can increase stress within

the family. The cascade of events and stressors continues with the effort to gain reemployment that can increase family tension, undermining the quality of parenting and spousal relationships (Vinokur et al. 1996). Similarly a return to work after physical or depression can present major challenges for workers and employers (Brenninkmeijer et al. 2008). While serious work accidents have declined over the last century in industrialized countries, they still take a substantial economic toll (Davies and Teasdale 1994) and influence health and well-being (Milczarek and Najmiec 2004) and the course of recovery is importantly influenced by organizational and insurance factors (Franche and Krause 2002).

Even planned life transitions such as entering the workforce for the first time can produce new demands for coping with unfamiliar circumstances, increase anxiety, produce confusion, personal withdrawal and even depression in young people not adequately prepared to cope with the new demands of the workplace (Elder and O’Rand 2002; Hodkinson et al. 2013). This is particularly true if supportive structures within the workplace are not available to bring in new workers and to socialize them to respond effectively to the demands that are required.

To take a third example, retirement for some may mean relief and only the loss of stressful work (Wang and Shultz 2010). On the one hand for others it can mean the loss a valued friendships and colleagues, the loss of the source of meaning in life (Jahoda 1982; Shultz and Wang 2011). For still others the end of working life can mean inadequate income and a cascade of economic stressors associated with economic deprivation (Institute of Medicine 2001; Shultz and Wang 2011).

1.3 Mobilizing Effective Support for Working Lives in a Changing World

But transitions are not only times of elevated risk, they also times of opportunity for effective intervention. Transitions provide an opportunity for policy and program initiatives to prevent problems and engage in various kinds of risk reduction for people facing both predictable and unexpected transitions (Semmer 2003, 2004). A number of chapters in this volume offer creative approaches to developing new policy and program initiatives that can transform moments of transition into opportunities for health protection and illness prevention.

A major challenge to program and policy initiatives in the area of work and health is described by Riley et al. (1994) as “the mismatch problem”. They argue that the needed changes in social institutions almost invariably lag behind the changes that are actually occurring in people’s lives. For example in some countries baby boomers are approaching retirement in large numbers and yet social policy is unready to respond. In these circumstances adequate retirement income may not be available and health institutions may not be ready to respond to the increasing health needs of an aging population. In addition many employers may be unready or

unwilling to hire older workers who may wish to work part-time or to work for extended periods after retirement to supplement their income.

The emergence of part time and nonstandard work illustrates yet another kind of mismatch problem. Jobs as we conventionally understand them are disappearing and along with them are being replaced by more insecure part-time work without health and other benefits to support workers (Houseman 2001). Many policies to support work and family life are still stuck in the mid-twentieth century and not responsive to the current economic and labor market or the likely future realities confronting workers and their families (Allen et al. 2000; Baker et al. 2001). The cost of this mismatch between current market reality and policies and programs will be high both for workers and their families and also costly in the long term for employers and for governments.

It is probably inevitable that social policy will always be reactive and not quickly respond to changes in working life that are driven by changes in technology, economic circumstances or political systems. Demographic social and economic changes emerge only slowly and political systems respond even more slowly. Nevertheless researchers concerned with improving social systems aimed at supporting workers need not wait until the political opportunity is available or the crisis is necessarily imminent.

Opportunities for innovation in working life are widely available and can be treated as a chance to experiment and develop new methods of supporting the workers experiencing the demands of return to work after illness or psychological difficulties (Blonk et al. 2006; van der Klink et al. 2003). Sometimes these opportunities will emerge from new government initiatives but perhaps even more often they will emerge from partnerships between employers on the one hand and researchers on the other concerned not only with worker well-being but also with organizational effectiveness and productivity.

These potential “win-win” situations are places where collaborative research and demonstration projects can be mounted and evaluated so that they can both inspire possible later social policy initiatives and be available when political will is finally inclined to support them. Taking a life course perspective to examine where interdependent careers can be supported or where planned or unplanned transitions can disrupt working life provides us with a conceptual map. Consider the following examples.

One clear example of the interdependence of multiple careers has to do with the conflict between working life on the one hand and childbearing on the other (Allen et al. 2000; Geurts and Demerouti 2003). Economic and social change has shifted both family relations and working life. Women have been entering the workplace in increasing numbers and wish to continue both their working careers and their roles in child bearing and motherhood. Mothers must somehow negotiate their individual jobs and the additional job of care giving for their infants and young children. The programmatic challenge involves finding ways to support both mother and family before the time of childbirth and immediately thereafter. And also requires finding accommodations for the mother to reenter the workforce.

Previously this has meant that mothers and families had few choices. For mothers it often meant that they were unable to easily reenter their jobs when they were ready to do so. Now new programs are being developed that help mothers and family members during the critical transition to parenthood and at the same time creating the circumstances for mothers to reenter the workforce when they are ready (Toppinen-Tanner et al. 2013). Supportive programs to negotiate the transition for both mother and child and other family members require coordination between employers, families and existing social policies. Because the interests of all these groups are not always aligned, program design and development must not only be sensitive to the circumstances of family members, but also alert to the critical costs and benefits for employers and the public sector.

The transition from school to work represents a second example of a transition in the life course where changing economic circumstances, labor markets and demographics all may influence success or failure. The transition from school to work is critical because for young people having difficulty entering the labor market it can mean years of delay in establishing a firm career track, increase the likelihood drifting from job to job, and increasing dependence on public sector support. For young people caught in these circumstances it can mean discouragement and social drift (Hodkinson et al. 2013; Kiuru et al. 2007). Building a strong link between schools and potential employers and at the same time strengthening the capacity of young people to enter the workforce is the key to supporting this transition. Here again, the development of new model programs in secondary schools strengthen youth ability enter into the workforce (Vuori et al. 2008) can begin to close the mismatch between social circumstances, changing labor markets on the one hand and social policy on the other.

Still a third example has to do with the transition back to work after illness. Smoothing the transition back to work after an unplanned disability physical or psychological illness (Brenninkmeijer et al. 2008) has not always been a priority for employers, government agencies or for workers themselves. Employers may be reluctant to welcome workers back into the workforce after an illness because they may be unsure about worker productivity. Government agencies are often more concerned about providing minimum income during the period of illness or disability. The workers themselves may have lost confidence in their own abilities or fearful about meeting the demands associated with reentry into full-time work. Workers who remain out of the workforce and dependent on disability support may not only be costly to taxpayers in the short term but also costly in the long-term as workers lose their ability and motivation to reenter the workforce. Here again a gap exists between current patterns of policy for support for disabled workers and programmatic efforts to help workers reenter the workforce. Fortunately programs are now emerging to help workers regain confidence in their abilities to resume their working lives (Blonk et al. 2006). Programs of this sort are likely not only to improve the psychological well-being of individual workers, but also reduce economic dependence on public sources of support.

In all three of these examples one can see that the interplay of multiple conflicting work and family careers across the life course. Changing economic circumstances

can make even planned transitions such as such as childbearing and entry into the workforce after school challenging. Transitions back to work triggered by unplanned life events like illness also require support. Innovative evidence based programs can provide models that can encourage new policies that reduce the gap between the changed circumstances in the lives of workers and their families and policies to support them.

1.4 Conclusion

The interplay of work and health over the life course described here amply illustrates that changes in economic conditions, emergent technologies, national demographic changes and political reform will produce changes in working conditions that will in turn influence worker health. To understand more deeply how those large scale changes influence the health of workers and their families we must, at the same time, examine how they influence the life course of workers and particularly their multiple careers as workers, parents, and members of their communities. Only then can we begin to design policies and programs that are both humane and productive for both the workers and their employers.

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Chapter 2

Informal Employment and Vulnerability in Less Developed Markets

Simo Mannila

2.1 Less Developed Markets and the Informal Economy

2.1.1 *Less Developed Markets and Labor Market Segmentation*

Less developed markets usually refer to markets in developing countries or countries with emerging markets that contain market imperfections. Some labor market segmentation is typical for all countries, and even many developed markets may contain labor market segments that are less developed. The division of formal vs. informal employment is a form of labor market segmentation, which is linked to a wide set of vulnerabilities for those who work informally. These vulnerabilities appear in less developed markets in proportion to the scale of informal employment and the social policy regime. They are most relevant also in developed markets due to the international migration and its links with informal work.

In this Chap. 1 describe informal employment conceptually and empirically, show its links with various vulnerabilities and illustrate the situation by five short country cases representing different types of markets. The chapter ends with comments on policies and research.

2.1.2 *Informal Employment and Informal Sector*

Informal employment was not significantly addressed until the 1970s (Bangasser 2000), and major conceptual as well as data gathering problems still remain, a situation that hampers policy making (e.g. Bernabe 2002).

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The ILO (2002, 7, 123, 2004) defines informal employment using two dimensions:

- the type of production unit and
- the type of job.

The former dimension refers to the informal sector or informal economy, the latter dimension to informal employment. Regarding the types of production units, there are

- formal sector enterprises,
- informal sector enterprises and
- households.

Regarding the types of job, there are

- own-account workers,
- employers,
- contributing family workers,
- employees and
- members of producers' cooperatives.

This classification is illustrated by the ILO Standard presented in Table 2.1. Here, the boxes 1–9 describe the above-mentioned types of informal employment, and the light blue boxes show the varieties of formal employment. Black boxes show options that are not possible.

All work in the informal sector is defined as informal employment, but in the formal sector there may also be persons working informally; by job type, they are often employees or contributing family members. The distinction between formal

Table 2.1 Informal employment by two dimensions, types of jobs and types of employment (Hussmans 2004)

Production units by type	Job status in employment									
	Own account workers		Employers		Contributing family workers	Employees		Members of producers cooperatives		
	Informal	Formal	Informal	Formal	Informal	Informal	Formal	Informal	Formal	
Formal sector enterprises					1	2				
Informal sector enterprises	3		4		5	6	7	8		
Households	9					10				

and informal is not strict, and we may also define various levels of informality (e.g. Chen 2006). There are formal sector enterprises that use informal labor, and there are formally employed persons who besides their formal job also work informally. Currently, there is wide consensus that formal and informal work depend on each other, both nationally and globally (e.g. Guha-Khasnobis et al. 2006). Thus, informal employment exists both in the formal and informal sectors of the economy. “Informal work” could be used as an overarching term to cover both sector and employment aspects of informality.

The International Labor Organization (ILO 2002, 2004) has been the key organization addressing informal employment, through research, development and policy advice (ILO 2014a; Hussmans 2004). The OECD (e.g. 2002, 2004; Huitfeldt and Jütting 2009) and likewise the World Bank (2014) have given major contributions for research into informal employment and related policy-making. Current research around the topic takes account of globalization and modernization, as well as human rights and deficits in work life.

Informal employment is not only typical of less developed countries. The European Union also contains countries with less developed markets and informal employment, which is often equaled to “undeclared work” (European Commission 2014). This refers mainly to tax avoidance, which is counterproductive to government financing and budgeting (e.g. Williams 2008). Other terms used to refer to informal work that are used in European research and policy papers include the “shadow economy” or “hidden economy” – emphasizing somewhat the similarity to “undeclared work” and the illegal aspects of informality (e.g. Packard et al. 2012) – and the “submerged economy”, with similar connotations (e.g. Borghi and Kieselbach 2012). These terms, nevertheless, neglect other aspects of informal employment outside of financial or legal ones. Employees often do not know the formality or informality of their work, do not care or cannot influence it, and the same is often true for self-employed persons: Regulations are complex, working formally requires additional financing, and the employees do not always have sufficient voice in the workplace. In the US research there has been some focus on informal economy as legal cash-only exchanges (Losby et al. 2002).

2.1.3 Informal Employment, Development and Vulnerability

During the ongoing globalization we have seen a major increase in the informal economy, which earlier was considered a historical relic destined to disappear with the development of markets (Bangasser 2000). Some researchers see this process as largely driven by employers and the owners of capital for their own benefit (Lund 2009; Sassen 1999), with globalization favoring informality and potentially threatening welfare states (e.g. Wood and Gough 2004). Some others emphasize the role of urbanization and shrinking agriculture with a corresponding restructuring of labor markets nationally and globally (e.g. Kucera and Roncolato 2008). These major trends – globalization and modernization – run in parallel and do not exclude each other.

Economic growth during the past few decades has largely taken place in the informal economy. The outflow of labor force from subsistence farming into industry and services seen in the developing countries does not reduce the importance of informal employment as a global phenomenon. At the turn of the millennium, for instance, informal work in Africa accounted for almost 80 % of non-agricultural employment and over 90 % of new jobs (ILO 2012). Informal employment also compensated for the demise of the formal economy in the countries in transition: When the formal sector partly collapsed in the 1980–1990s, the deterioration was widely made up for by increased informal employment. The opening of labor markets with low productivity to the global economy led to a reduction of formal economic activity. Another reason for the upsurge of informal employment in these countries was the rigidity of formal labor markets due to dysfunctional laws combined with inadequate law enforcement.

Informal employment is a gender issue. According to the ILO (2012) informal employment is more common among women than men, though men work more often in the informal sector. Women work more often as contributing family workers and in paid domestic activities in private households; women work also more often than men in small-scale economic units. In India and Indonesia 90 % of women working outside agriculture worked informally, e.g. food processing, handicrafts and street vending (ILO 2002, 11–12). Informal employment is also related to migration in developing as well as developed countries (for a US perspective, Smith Nightingale and Wandner 2011). Some immigrant groups and ethnic minorities tend to be at higher risk of labor market marginality as compared to native populations and more often end up in informal employment, a result partly caused by discrimination (e.g. Akhlaq 2005). Lacking entrance into formal employment, immigrants must take what is available, and many immigrants come from countries where informal employment is very common.

Informal employment in less developed markets comprises a wide range of vulnerabilities. This is due to its key characteristics: informally employed persons are not recognized or protected under legal or other regulatory frameworks (ILO 2002). Characteristics of informal employment in practice are, for instance, verbal contracts instead of written ones, leading potentially to insecurity and arbitrary rules. Informal employment typically involves irregularity of employment, uncertainty of wage rate and long or uncertain working hours linked with low income and risks to occupational health and safety (Upadhyaya 2003). Informal employment can also be a career trap, and in this way it can have a harmful intergenerational impact on life courses. Informal economy with high mobility barriers separating labor market segments often leads into a poverty culture for some population segments. This is linked with lowered risk-taking ability of the poor keeping them poor. There are also other repercussions that may cause general societal harm and instability that extends also to the well-to-do strata (Wilkinson and Pickett 2010).

2.2 Informal Employment and Types of Vulnerability

2.2.1 *Denied Essential Securities*

The ILO (2012) statistical update finds that informal employment is in general paired with low income per capita and also a high poverty rate. This link may also be based on selection as well as being a result of informal employment. The selection means that people in poverty may have no other options than informal employment, or they may not be aware of their rights or how to access their rights, or those rights may not even exist in their country. In any case, the key vulnerability linked with informal employment is poverty. According to Barrientos (2010), vulnerability can be defined as the probability that individuals, households or communities will be in poverty in the future. Thus, instead of transitory poverty, the focus should be on long-term poverty.

There are seven essential securities that are usually denied to informal workers (ILO 2002, 3–4). They are (1) labor market security i.e. a prospect of an adequate level of employment, (2) employment security e.g. protection against arbitrary dismissal, regulations concerning hiring, (3) job security i.e. a perspective grounded in an occupation or a career, (4) work security e.g. protection against accidents and illness at work, limits of working time etc. (5) skill reproduction security i.e. skill enhancement and improved competence, (6) income security i.e. adequate income and (7) representation security i.e. collective voice and social dialogue. The share of informal employment is indicative of the unavailability of securities and, thus, vulnerability.

2.2.2 *Inadequate Social and Health Protection: What It Means*

One of the key vulnerabilities of informal employment is absent or inadequate social protection, which entails poverty and health risks: poverty and health are not only at risk due to the character of work. According to the ILO (2002, 55–57), only 20 % of the world's workers have adequate social protection. More than 50 % of all workers including their dependents were excluded from any social protection, be it contribution-based social insurance or tax-financed social assistance, targeted or with universal coverage.

Since global growth takes place largely in the informal economy, the current development of labor markets is alarming (Somanathan et al. 2013). Lack of medical care and sickness insurance, deficient occupational health and safety with an elevated risk of work injuries or occupational diseases, and inadequate maternity protection have a direct harmful impact on health, which can be further aggravated by poverty. Informal workers have poverty rate due to low pay and irregularity of

employment, but the risk is higher also, for instance, due to catastrophic costs to be covered in the case of an idiosyncratic risk, such as sudden ill-health in the family, or in the case of a covariate risk, such as a general macroeconomic slowdown with an impact on the demand of work (Holzmann and Jörgensen 2001).

Social protection is often seen as a form of risk management or pooling (e.g. Ewald 1986; Holzmann and Jörgensen 2001). Lack of protection entails higher vulnerability even when informal employment may give adequate income and pose no major risks in terms of occupational health and safety. There is research from developed countries pointing out the negative health impacts caused by job insecurity through stress (Sverke et al. 2006). Informal employment should, thus, be understood also as leading into higher stress levels. However, this link is bound to be culturally conditioned.

2.2.3 Vulnerability: Involuntary or Voluntary Informality

It seems that in general informal employment is involuntary, but there are results showing that this is not always the case: The link between informal employment and vulnerability is more complex. Some informal workers consciously incur the risks of vulnerability (e.g. Lund 2009), and in some cases informal work seems to be a part of a household strategy, where some members of the household work formally, others informally (Maleva 2003). A person may also work both formally and informally, so that informal work is supplementary to the formal employment. In the EU approximately 5 % of all formal employees received also undeclared wages from their employers, which on average amounted to 40 % of their total salaries (Williams 2009). In this case, supplementary income from informal employment is very important to a small fragment of the workforce.

Hazans (2011a, b) demonstrated how there is a marked difference between informal employees and the informal self-employed in Europe. The former group was found to be at risk of poverty, although better off than unemployed persons, while the latter group was income-wise at least as well off as those formally employed. According to Hazans, both labor market exclusion and discrimination push the persons in the former group to informal work, and the composition of those working informally shows that vulnerabilities are accumulated: those persons who were low-educated, elderly and persons with disabilities were more likely to work informally; in Western Europe, immigrants from CEEC or CIS countries also showed a higher rate of informal employment. The informal self-employed group in Hazans' study consisted of risk-taking small-scale entrepreneurs who were discounting their social security either willingly, for financial reasons, or through a lack of faith in the available social protection.

2.3 Case Studies

This chapter illustrates three types of markets and three levels of informality by means of country cases. Firstly, informal work in developing countries undergoing globalization and urbanization is described by the very different cases of Nepal and Vietnam. By the ADB social protection index, both countries are in the middle range of Asian developing countries, Vietnam being somewhat better off than Nepal (Weber 2006).

Secondly, informality during transition and in emerging markets, as a response to shrinking of the formal labor market, market rigidities and globalization is described through the cases of the Russian Federation and Argentina. These are developed countries that have undergone a systemic crisis and transition. Finally, informality in a developed labor market with good law enforcement is described through the case of Finland. In this case, informal employment exists in certain segments of the population only.

The links between market development, levels of vulnerability and country cases to be presented are shown in Table 2.2.

2.3.1 Nepal

In Nepal altogether 76 % of the labor force is engaged in agriculture, and the share of the non-agriculture formal sector is only 6 %, meaning the share of the informal non-agricultural sector is 18 %. Some typical groups of informal workers are farmers or farm-related workers, street vendors, hawkers, craft workers, daily wage workers in construction, transport workers, microenterprise workers and small scale industry workers producing a variety of goods and services, as well as traditional

Table 2.2 Development of markets, types of vulnerability due to informal employment and some country cases

Development of markets	Less developed markets	Emerging markets	Developed markets
Types of vulnerability	Inadequate legal protection	(Rather) adequate legal protection	Adequate legal protection
	Inadequate law enforcement	Inadequate law enforcement	Adequate law enforcement
		Problems of trust	Some risk groups (e.g. immigrants, ethnic minorities)
Country cases	Nepal, Vietnam (moving towards emerging markets?)	Argentina, Russian Federation	Finland

occupational services such as barbers, cobblers, and tailors. Particularly vulnerable groups include those disadvantaged due to caste or discrimination on the basis of religion or ethnicity and some occupational groups, e.g. porters and loaders, street vendors, women in low income groups, disabled persons and children, victims of prostitution and trafficking and people with HIV/AIDS (Upadhyaya 2003; ILO 2004).

Based on the share of informal employment, most of the Nepalese population is highly vulnerable and has very limited access to any type of risk management by means of social protection. The informal sector and agriculture provide only half of the GDP in Nepal, although most citizens work in these parts of the economy: The low productivity is linked to the high poverty rate (Suwal and Pant 2009).

A comprehensive approach to reducing vulnerabilities is recommended for Nepal, and it draws on a rights-based and universalistic social protection regime (Koehler 2011). It would mean an extension of social protection coverage irrespective of the employment status of the household, making access to social protection more equitable. This may, however, be very difficult to implement in a poor developing country due to financial constraints.

2.3.2 Vietnam

Labor force surveys carried out in Vietnam in 2007 and 2009 show the predominance of informal work. Most employment (82 %) and nearly half of all non-farm work can be defined as informal. In industry, the main informal employers are in manufacturing and construction, followed by trade. In these branches of industry most workers are informal, and most jobs in household businesses are also informal (Cling et al. 2011).

The main picture is similar to that in Nepal, but there are major differences between these two cases. Firstly, in Vietnam informal employment does not seem to be concentrated among migrants or ethnic minorities as is often postulated. Secondly, the informal sector is also rather separate from the rest of the economy and its main market is households and household business, which runs contrary to the general hypothesis of the situation. Thirdly, the informal sector is widely neglected in public policies, and since they are separated from the rest of the economy, there is a risk of long-term poverty. A key reason for being informal in Vietnam is that household businesses often do not know that they should be registered for their own sake (Cling et al. 2011).

The Government of Vietnam aims to extend social health insurance to cover the whole population in 2014, and major steps have been made in this respect (Somanathan et al. 2013). The enrolment rate is already close to the goal, but this does not mean that the entire enrolled population would be covered as envisaged (Huong et al. 2013). The system is fragmented so that some population segments or family members are left out, due to inadequate access to facilities or problems in

raising awareness, and out-of-pocket payments remain high. These are inevitable difficulties when introducing universal health insurance (Acharya et al. 2012).

2.3.3 *Argentina*

Argentina went through a period of privatization and deregulation due to its transition into a global economy in the 1990s. This reform included also a major change in the social security system, leading to its deterioration (Cooney 2007). In Greater Buenos Aires, the share of informal work reached 38 % of all employment by 1999, with incomes 45 % lower than those for formal employment, i.e. with a higher risk of poverty (The World Bank 2008).

The increase of informal employment was partly due to an increased tendency of female household members to take up paid – though informal – work; it was also as a result of increasing informality in construction, hotel business and transport, as well as increasing informality in mid-sized firms in general (The World Bank 2008). However, the share of informal employment in the labor force has been decreasing during the past 10 years, which is explained by the economic recovery and the net creation of formal jobs. Informal employment was reduced by one third during 2003–2012 (Bertranou et al. 2013).

According to Esquivel (2010) the informal employees and independent workers in Greater Buenos Aires were more likely to be men, semi-skilled or unskilled and working in construction, trade and transport. The monthly earnings of informal employees were half of the mean earnings of a corresponding formal group, while for independent workers the incomes were better than in the comparison group. Formal enterprises often had informal employees, too, and they were often women: They were better off income-wise than those in the informal economy. The third main group consisted of domestic workers: This group is the most vulnerable due to low education, low pay and discrimination.

Increased informal employment in Argentina was a response to structural adjustment aimed at globalization. It remains to be seen, whether the share of informal employment will remain at today's relatively high level or yet decrease. Life-course effects in Argentina are a more complicated issue, since transitions between formality and informality are not rare and go in both directions, with the exception of domestic workers, who are stuck in their work and who have little chance of career or income development (Esquivel 2010).

2.3.4 *Russian Federation*

In Russia there was a major increase in informal employment during the transition to a market economy and globalization, similar to the less dramatic development in Argentina. According to Gimpelson and Kapeliushnikov (2006) informal employment

spread largely due to labor market rigidity. It was estimated that 27 % of Russia's GDP was produced in the informal economy in the late 1990s and informal secondary employment amounted to approximately 20 % of the value added produced in the informal economy (Kim 2002).

Research has been done into the importance of barter and the famous "dacha" economy in the 1990s as a household survival strategy, combined with formal work or on its own (e.g. Clarke 1999; Fadeeva et al. 2002). Since then, the mutual exchange of goods and services, barter and undeclared trade have expired as the market economy has developed, though non-market exchange continues in economically stagnant regions. The spread of informal employment buffered the households from the most extreme forms of poverty in the transition years, but it may entail a risk of a poverty trap and exclusion from emerging social protection (Pirainen 1997).

Merkuryeva (2006) divided informal employment into two main components: an inferior, disadvantaged labor market sector for employees, and the entrepreneurial sector, which gives better gains than average employment. According to Kim (2002), those working in the informal sector had lower education as compared to those employed in the formal sector, but they did not have a lower wage level. Lehmann and Zaiceva (2013) saw that informal work is segmented, with a lower open-entry tier with low wages and an upper rationed tier with high wages. The former tier means unskilled work for example in construction and trade, while the latter tier brings additional income for those relatively well-off. The results are rather similar to those found by Hazans (2011a, b).

As in Argentina, it is still unclear to what extent informal employment will be reduced, if economic development remains positive. Legal regulation of labor markets and contracts exists, but it is often complex, not well known and not always observed. Informality is also maintained in Russia by extensive labor immigration, combined with bureaucracy and xenophobia that keeps newcomers out of formal work (Migration Policy Centre 2013).

2.3.5 Finland

The Finnish labor market is well regulated both legislatively and through tripartite solutions. There is a common understanding that informal employment is marginal in Finland. As compared to other OECD countries, the size seems to be at the same level as for example in Czech Republic, Slovak Republic or Denmark, but lower than in Estonia, Poland, Italy, Spain or Belgium. The share of persons in undeclared activities is below 4 %, and only 2 % of employees saw at least a part of their salary or remuneration paid in cash and without a due declaration (Schneider 2010).

It is estimated that the grey economy accounts for 7 % of the GDP in Finland (Hirvonen et al. 2010). This focus on informal aka "grey" economy in Finland is typical of EU countries, with an emphasis on various types of tax evasion and economic crime. Various solutions have been sought by means of a government

programme (2012–2015) to curb these problems for fiscal reasons and in defense of fair competition.

This discourse, however, sheds little light on informal employment as a social phenomenon. The predominantly moral and fiscal tones of the discourse leave out the perspective of those working informally – since this is their only option to work or since they take a conscious risk to seek supplementary income or start a business. In Finland and in other “older” EU countries, more knowledge of informal employment is needed, including its links with vulnerability such as in-work poverty and lack of risk management. Research results indicate, for instance, higher poverty risk among immigrants, partly due to labor market discrimination excluding some of them from the formal labor market (Liebkind et al. 2004; Akhlaq 2005). Unlike in the USA, it is typical that informal employment is not discussed in the context of in-work poverty in the EU (Fraser et al. 2011).

2.4 Ways Forward

Using the framework of Table 2.2, we see that (1) some regulation is needed to reduce vulnerabilities linked with informal employment. Thus, in less developed markets, rather than rigidity due to excessive regulation, the issue is inadequate regulation of work life. With economic growth and stabilization of the society, developing countries and countries in transition aim to reduce informality of work and develop social protection, although there may be a counter-tendency due to global competition. Thus, more regulation is needed but it is not enough; (2) the laws must be technically of the kind that they work towards the goals set, with proper law enforcement and good governance. Emerging markets have faced and still face problems in this respect: old rules of the game must have been replaced by new ones, but they are not valid for everybody.

Recent research highlights the need for more regulation of the economy (Williams 2013), which sheds critical light on the assumption that labor market rigidity is cured through deregulation – most obviously, we should speak about reregulation. Finally, in developed markets, too, there are segments of the population working informally, with subsequent vulnerabilities. In these countries (3) increased awareness of the phenomenon and more focus on marginal groups in the labor market and their life in general are needed.

2.4.1 Policies

The key solution to the problem of informal employment is that informal workers should be registered, recognized and protected: Working towards this means progressing along a continuum with immediate, short-term, medium-term and longer-term goals (ILO 2002, 4–6). A way towards less vulnerability is the Decent

Work Agenda, developed by the ILO (2014b). It has four strategic objectives, with gender equality as a cross-cutting objective. The four objectives are, [guaranteeing rights at work](#), [extending social protection](#) and [promoting social dialogue](#).

Successful policy-making here requires that legislative work, law enforcement and awareness raising goes hand in hand, supported by statistics and research. An emphasis on creating jobs is needed, since the first prerequisite of the other three strategic objectives is that there is work available; however, economic growth as such does not seem to promote decent work without conscious policy-making. Policies towards decent work and reducing vulnerabilities should focus on human rights, labor market mechanism and social policy, and they should take into account cultural traditions.

A key element in promoting the decent work would be a matter-of-fact view on informal employment. If informal employment is equated with undeclared work solely, this may lead to “blaming the victims”, i.e. both employees and employers, including the self-employed, for whom the main thing is work, not its formality vs. informality. A more multifarious understanding of informal employment is needed such that the focus would fall on all working conditions. We should also have an adequate time perspective to understand the impact of informality on individual life courses, career perspectives, family and intergenerational mobility (Williams and Round 2008). Policies should also be culturally sensitive to avoid the risk of potential harm for some immigrant and other minority groups.

The reduction of vulnerability should have a twin-track approach: on the one hand, support to the increased formalization of employment relations, on the other hand, support to the development of general social protection schemes (e.g. Smith Nightingale and Wandner 2011). Upadhyaya (2003) drafts four dimensions to reduce vulnerabilities in informal employment. He sees that a mix of occupation-based, caste or ethnicity-based, area-based and gender-based methods should be utilized when designing policies.

2.4.2 Research and Policies

New research inputs into informal employment beyond the present work in mainly labor economics would be welcome. Further country-specific research is needed to look how various vulnerabilities are produced and which groups are most at risk among those in informal work in different countries. The concept of social risk management by Holzmann and Jorgensen (2001) and an understanding of social policy as risk pooling (Ewald 1986; Mannila 2005) could provide ways forward for a comprehensive understanding of vulnerabilities.

There is already more specific interest in the health impact of informality beyond the general hypotheses of vulnerability. Research can give concrete ideas for reform, such as those for redesigning the social health insurance in Vietnam including its funding (Tien et al. 2011). Recent research often recommends universal access to health services (e.g. Cho 2011), but the population needs vary by countries and

regions, and there is no single way ahead. Universal coverage of health insurance may also be also linked with reduced formalization of employment and, thus, have a negative impact on the coverage of other forms of social protection (Wagstaff 2012; Aterido et al. 2013). In some cases it would be useful to develop social insurance only for secondary health care, in some other cases the public interest starts already with primary health care. In both cases, health insurance must be understood as a part of comprehensive health policy (Bennett et al. 1998).

Since both fixed-term contracts and informality seem to be gaining ground globally, it would be productive to study the coping mechanisms used by this labor force, since they may be most relevant for developed markets with increasing job insecurity. Similarly, results from the body of research on job insecurity might also be useful for understanding the impact of informal employment on vulnerability of individuals and families (Sverke et al. 2006).

Finally, the potential causes of the links between migration and informal employment – for instance, work-related or family traditions of some immigrant groups, barriers to formal employment due to discrimination or problems of qualification, operating mechanisms of the ethnic niches of various labour markets – would deserve more detailed research focus.

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Chapter 3

The Economy of Sustainable Careers During the Work Life Course: A Case from Finland

Guy Ahonen

3.1 Introduction

As a consequence of increasing life year expectancy the demands to work longer also increase. Unless the average lengths of work careers grow at the same pace as average life years the dependency ratio worsens. This means that a shrinking number of people support the lives of a growing number of people outside the work force. To be able to maintain or even increase the current standard of living the productivity of the economy must grow faster than the increase of the dependency ratio. Therefore, one of the most efficient means to secure the balance of public finances of most countries with an ageing population is to extend the work careers. It is not widely known how important this measure is. If it were, a lot more attention would be paid to it in public media and a lot more resources would be allocated to improving working conditions. Although the annual losses caused by early retirement is in Finland much greater than the single payment risk of guaranteeing state loans of some south European countries in financial trouble, the public attention of the latter is much greater than of the former.

From an economic point of view it is important that we know the economic value of the benefits that are created as a consequence of policy actions. Basically, it is feasible to increase the amount of an activity until the point when the marginally increased benefits are smaller than the marginally consumed resources (Sugden and Williams 1978). Benefits can occur in the form of increased production or reduced need of health care expenditure. By and large, it has been established that the loss of production is much greater than health care expenditure (Kiiskinen et al. 2005).

The original version of this chapter was revised: Wrong figure has been replaced by the correct figure. The erratum to this chapter is available at http://dx.doi.org/10.1007/978-94-017-9798-6_17

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The promotion of longer work careers can basically be divided into two types of activity: The change of the pension system and the improvement of the quality of work life. To the first type of activity belong the changes in regular pension age. It is assumed, and also demonstrated, that an increase of the official lowest pension age increases the average length of work careers. The improvement of the quality of working life usually requires extra efforts and resources. Partly therefore, employers and their associations are more interested in pension system changes. In order to know how much we can afford to improve the quality of work we need to know how great the potential benefits are.

This chapter deals with the promotion of quality of work life. We aim at contributing to the principles according to which measures to promote well-being at work should be chosen. We have an economic approach, which means that the reasoning concentrates on gained and lost resources expressed in productive years and money.

More specifically, the aim of this essay is to demonstrate how an economic, cost of illness, approach could affect the policy conclusions about extending work careers, compared to traditional approaches and that it is important to look at different age groups when planning actions in this respect. In addition, a calculation of the costs of early retirement in Finland is conducted and its implications are discussed. Particularly, it seems like too much attention has been paid to older workers in extending work careers.

3.2 The Case of Finland

3.2.1 The Approach and Data

We use retirement and disability pension statistics in Finland during 2003–2011 to find out how different approaches can change policy conclusions. We call the approach based on the number of cases in various groups the traditional approach. We compare this approach to a cost of illness approach, where we calculate the number of lost working years. We particularly look at the age and diagnosis distribution of cases. For calculating the annual cost of early retirement Finnish 2010 data is used.

The data about retirees during 2003–2011 is obtained from Finnish Centre for Pensions (Eläketurvakeskus). For the calculation of the annual cost of early retirement Finnish public statistics for 2010 is used. This time interval is chosen according to availability of data and because it is a “normal” year as far as the number of new retirees is concerned. The new retirees are divided into three groups: 16–34, 35–54 and 55–68 years old. These groups are commonly used to represent young, middle aged and ageing workers in Finland. The insured population is divided into 1 year younger groups. This is because in the population statistics age is recorded based on age at the beginning of the year, whereas in the pension statistic at the end of the year.

3.2.2 *The Finnish Pension System*

The Finnish economy is characterized by a large amount of basically free public services, like education, health care and elderly care. This renders a high general tax level, which makes general labor market participation necessary.

In Finland “there is a basic state pension (national pension), which is income-tested, and a range of statutory earnings-related schemes, with very similar rules for different groups. The schemes for private-sector employees are partially pre-funded while the public-sector schemes are pay-as-you-go financed (with buffer funds to even out future increases in pension contributions). From 2005, the accrual rate is 1.5 % of pensionable earnings at ages 18–52, 1.9 % at ages 53–62 and 4.5 % at ages 63–67. For a full-career worker working from age 20 until retirement at age 65, the total lifetime accrual will be 77.5 % of pensionable earnings (if pensionable earnings are assumed to remain constant for the whole career). Pensionable earnings are, from 2005, based on average earnings of the whole career. However, as pension accrues differently in different age groups ...the earnings received by older workers have more weight in the total pension. When the pensionable earnings are calculated the amount corresponding to employee’s pension contribution is deducted from the earnings. In 2008, the employee’s pension contribution was 4.1 % for employees under 53 years old and 5.2 % for employees 53 years old or older. Note, however, that the replacement rates are shown relative to total gross earnings (for comparison with other countries) rather than this measure of pensionable earnings.” (OECD 2011: 224).

Compared with other countries the Finnish pension system can be describe as an earnings-based, defined-benefit, public, mandatory, less generous than average (57.8 % vs. 60.6 %) pension system with no income ceiling (OECD 2011: Part II).

The old age pension age is 63–68 (ETK 2010). When a person gets retired at 63 he or she gets a work pension for the rest of life based on previous work years and earnings. If one gets retired in between 63 and 68 there is a super compensation, which means that every extra year adds more than the previous years to the old age pension. Normally people get about 60 % of their work time salary in pension. If 1 cannot make it to 63 there are various unemployment and disability benefit systems, depending on the reason to not working. If one is declared permanently disabled to work the person can get a disability pension on full or part-time. Annually some 70,000 people get retired, 20,000 of which on disability pension. The average overall retirement age is about 60. The average disability retirement age is about 52. From a cost of illness point of view about 350,000 work years (70,000×5) are lost every year due to early retirement, compared to the state when people would leave working life during normal retirement age (65). This is, roughly, the point of departure when we start analyzing the distribution of annual loss according to age groups.

3.2.3 *The Cost of Early Retirement in Finland*

In order to calculate the annual loss of early retirement we have basically two alternatives. We can either apply the incidence principle of cost of illness-analysis, which means that we calculate the loss of production caused by people leaving the work life each year (c.f. Tarricone 2006: 51). Or we could use the prevalence principle, which means that we count the number of people being on early retirement and express that number as the annual loss of working years. Both principles have been criticized for not being very useful for practical policy purposes (Saka et al. 2009: 27). These principles have also been criticized for not taking into account the fact that saving all or a part of these losses would only lead to increased unemployment. We disagree with this criticism and adhere to the economists who believe this criticism is based on false assumptions of how the economy works (SOU 2013: 132). Accordingly, we think it makes sense to estimate the total number of lost work years to find out the real societal cost of early retirement.

Below all the relevant factors influencing the estimated cost of early retirement in Finland during 2010 are pinpointed and discussed. Furthermore, various alternatives are identified to make minimum and maximum calculations. Finally, the suggested, most feasible result is expressed.

To make the calculation the following questions have to be answered:

- (A) How many persons got retired during that year?
- (B) What was their average age?
- (C) What is the reference age to which the above age should be compared?
- (D) How many productive work years were in average lost per each retiree?
- (E) What is the monetary value of an average full work year?

3.2.3.1 **The Number of Retirees**

According to Official Statistics Finland (OSF 2012) 70,741 persons got retired during year 2010 based on one's own work history.

New retirees receiving a pension based on their own work history are persons whose pension based on their own working career (old-age, disability, unemployment or special farmer's pension) has begun during the statistical year. A further requirement is that the new retiree has not received any pension of the aforementioned types for at least two years...a person is only entered in figures relating to the whole earnings-related pension scheme in the statistical year during which the first pension begins. (OSF 2012: 55)

Persons retiring on a **part-time pension** are not considered as all persons having retired on an earnings-related pension. Persons receiving a part-time pension are not included in the figures until the year when their pension is converted to some other pension based on their own work history, usually an old-age pension. (OSF 2012: 56)

The statistical figure can be considered quite restricted, because it does not include part-time pensions, which were 9,813 during 2010 (Ibid, 107). The majority of them were more than 58 years old. Assuming their working capacity to be 50 % leads to another 4,907 retirees that year. On the other hand, among the new

disability pension earners are included 5,600 people with part-time pension (Kivekäs 2012), who's working capacity was about 50 %. Consequently, to the official figures can be added (4907–2800) 2,107 lost work years as a part of the maximum calculation.

3.2.3.2 The Average Age of New Retirees

The average age of new retirees receiving a pension based on their own work history in 2010 was 59.6 (OSF 2012: 92). The retirement age is often measured through the expected effective retirement age of 25 years old, which was 60.4 years in 2010. In this calculation the former measure is used, because it describes the current situation, whereas the latter is related to the future.

3.2.3.3 The Reference Age

When calculating the loss of production due to early retirement a reference age is needed. This is the age before which exit from work life is considered to cause losses of work years. In 2005 Finland adopted a principle according to which the official general retirement age is 63–38. Although the lower retirement age is 63 it is reasonable to use 65 as the average retirement age in Finland when calculating the loss of working years due to early retirement. This is also the age which is usually mentioned in international comparative analyses of the pension system in different countries (Nordic Social-Statistical Committee 2008; DWP 2012). Sixty five is also the most common official retirement age in Europe (Ibid.). Furthermore, 65 is a common limit in many particular pension related legislations. So, for instance, unemployment and disability pension stops at 65, and the old-age pension starts (OSF 2011: 15). In our calculation 63 is considered a minimum assumption and 68 a maximum assumption. Sixty five is the default assumption.

3.2.3.4 The Monetary Value of a Full Work Year

In Cost of illness calculations the economic value of lost work years is usually measured in terms of labor costs (Tarricone 2006). This method is based on the standard microeconomic assumption that the marginal value of work equals its marginal cost. In a GDP approach the value of annual domestic production is divided by the number annual work years. This approach leads to a greater monetary value of a work year and is based on a labor theory of value (Pass et al. 1991: 292). We use the former approach and compare briefly to the latter.

In 2010 the average wage of a full time worker in Finland was 3,034 euro per month (SF 2012a, 13.1.2012). The total annual average wage cost is received by multiplying the annual wage by 12.5 (0.5 month mandatory additional vacation wage) and adding employers wage related additional costs, which were 26.3 % of

paid wages in 2010 (EK 2009). Thus the monetary value of the average full year worker in Finland was in 2010 equal to $(3,034 \text{ €} \times 12.5 \times 1,263 \text{ kk})$ 47,899 €. This is the default value. By using the annual gross domestic product (GDP) and dividing it by the number of workers we get another measure for the value of a work year. In 2010 the GDP was 179.7 billion euro (SF 2012b) and the number of employed people 2,447 million (Findikaattori 2012). By using these figures we arrive at 73,437 euro, which is used as a maximum monetary value for a work year.

3.2.3.5 The Total Loss of Production

When we multiply the number of lost work years due to early retirement by the monetary value of 1 year we receive the monetary value of the loss of production (Table 3.1). Using the default values we arrive at 18.3 Billion euro. The estimated minimum and maximum losses are 11.5 and 40.7 Billion euro. The relative difference between the maximum and default value is indicated in a separate column in each row.

In Table 3.2 the effects of different effective average pension ages on the length of work careers have been calculated. Expressed in GDP the Finnish economy would benefit 28 Billion euro each year if the effective retirement age would be 65 and 40 Billion if the age would be 68. Accordingly, the additional tax revenue would be nearly half of these sums (The average total tax rate in Finland 42 %, SF 2011; OSF 2011. These are huge figures, considering that the state budget was in Finland about 50 Billion euro in 2010 (Ministry of Finance 2009).

Table 3.1 The value of the loss of production in 2010 in Finland due to early retirement using different assumptions

Calculation item\assumptions	Minimum	Default	Maximum	Addition coeff.
New retirees	70,741	70,741	72,848	1.03
Average actual pension age	59.6	59.6	60.4	1.01
Reference age	63	65	68	1.05
Value of work year, €	47,899	47,899	73,437	1.53
Lost work year	240,519	382,001	553,645	
Value of loss of production, M€	11,521	18,297	40,658	2.22
% of GDP	6.4	10.2	22.6	

Table 3.2 The value of production and tax revenues in case of various factual average retirement age in Finland compared to 2010

	Year 2010	Avg 63 years	Avg 65 years	Avg 68 years
Expected number of work years	34.2	37.6	39.6	41.8
Index (actual 2010=100)	100	110	116	122
GDP, Billion €	180	198	208	220
Total tax revenues, Billion €	76	84	88	93

3.2.4 The Number of New Retirees in Finland 2003–2011

During 2003–2011 the annual number of retired people grew from 56,469 to 71,146 with a peak of nearly 80,000 in 2009 (Table 3.3 and Fig. 3.1). At the same time the number of insured citizens in insures from 3.67 million to 3.76 million. Accordingly the number of new retirees per 1,000 insured persons grew from 15.38 to 18.88, with a peak of 21.13 in 2009.

The development in different age groups was quite different (Figs. 3.2 and 3.3). As the number of new retirees per 1,000 insured persons grew during 2003–2011 by 29 % among 16–34 years old it went down by 28 % among 35–54 years old. Accordingly, the rise was 18 % among the 55–69 years old, with a peak in 2009 (Fig. 3.4).

When we look at the number of new retirees in different age groups (Fig. 3.1) we reach the conclusion that the oldest age group is by far the most important group

Table 3.3 Number of people retired each year 2003–2011 according to different age groups

Year	Age 16–34	Age 35–54	Age 55–69	All
2003	2,731	12,680	41,058	56,469
2004	2,906	12,190	42,724	57,820
2005	3,036	12,023	51,686	66,745
2006	3,159	11,434	49,396	63,989
2007	3,421	11,557	52,151	67,129
2008	3,621	11,222	57,475	72,318
2009	3,484	10,137	65,564	79,185
2010	3,488	9,561	57,476	70,525
2011	3,685	9,492	57,969	71,146

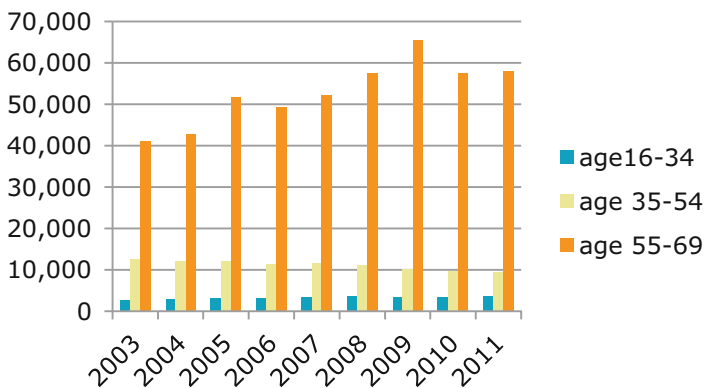


Fig. 3.1 Number of new retirees each year 2003–2011 according to different age groups

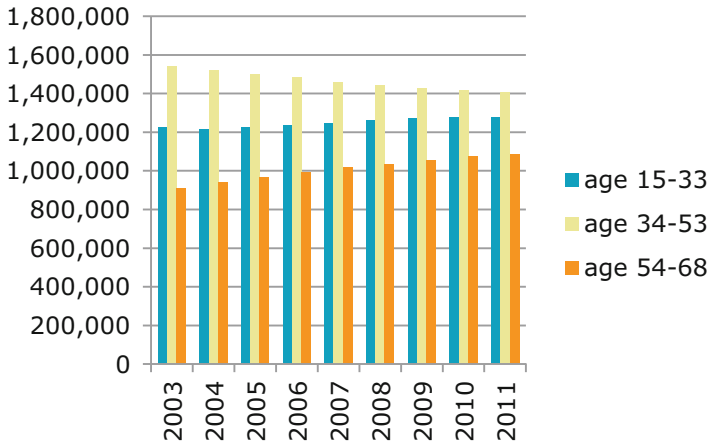
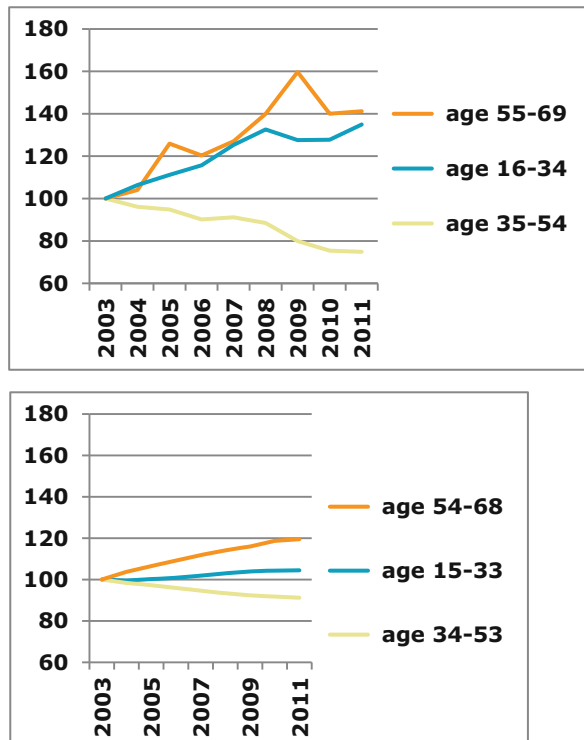


Fig. 3.2 Number of citizens in different age groups in Finland 2003–2011

Fig. 3.3 The development of new retirees and number of insured population according to age groups in Finland 2003–2011. 2003=100



from a work career promotion point of view. And when we look at the development of new retirees (Fig. 3.4) we reach the conclusion that young and old workers are the most important groups.



Fig. 3.4 The development of number of new retirees per 1,000 insured people in Finland during 2003–2011 according to age group. 2003=100

3.2.5 The Loss of Production Due to Early Retirement

Let us change the approach from number of new retirees to the loss of productive years due to early retirement. We make the following assumptions:

Calculation assumptions

	15–34	35–54	55–69
Arithmetic avg. age of group	25	45	62
Assumed avg. age	30	50	63
Calculated loss/person (years)	35	15	2
Assumed official retirement age = 65			

In the data the actual average ages of the different groups were somewhat above the arithmetic average. In order to make the calculation compatible with the calculated total loss of work years 2010 the assumed average ages of the groups were adjusted utterly up. This understates the losses for the younger groups, which is reasonable, as some of them return to work life after retirement.

By using the above assumptions we reach the following annual losses of productive years during 2003–2011 in Finland (Table 3.4, Fig. 3.5). The loss goes from 367,901 years to 387,293 with a peak of 410,015 years in 2008. A comparison of the different age groups indicates that young people and old people are equally important, as far as the number of lost work years and the severity of development are concerned (Fig. 3.5). This is astonishing when you consider that the number of new retirees among 16–34 years old in 2003 was only 2,745 and about 12,000, or about 20 times more, in the two other age groups. The differences are visible in Figs. 3.6 and 3.7.

Table 3.4 Estimated loss of work years due to early retirement in Finland 2002–2011

Year	Age 16–34	Age 35–54	Age 55–69	All
2003	95,585	190,200	82,116	367,901
2004	101,710	182,850	85,448	370,008
2005	106,260	180,345	103,372	389,977
2006	110,565	171,510	98,792	380,867
2007	119,735	173,355	104,302	397,392
2008	126,735	168,330	114,950	410,015
2009	121,940	152,055	131,128	405,123
2010	122,080	143,415	114,952	380,447
2011	128,975	142,380	115,938	387,293

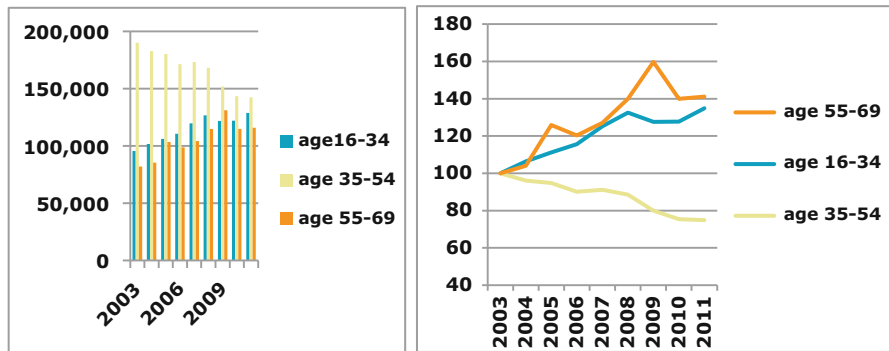


Fig. 3.5 The development of loss of work years in Finland 2003–2011 according to different age groups

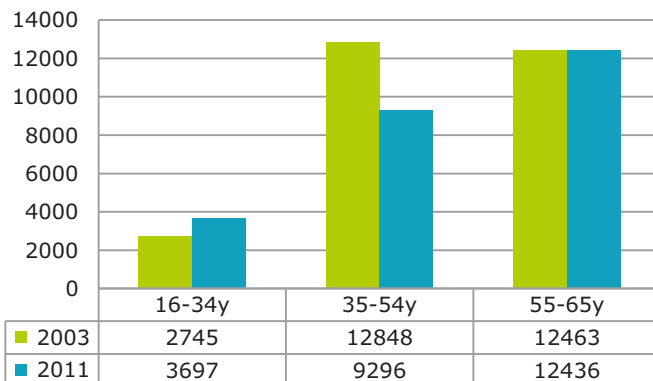


Fig. 3.6 Number of new disability pensions in Finland 2003 and 2011 according to different age groups

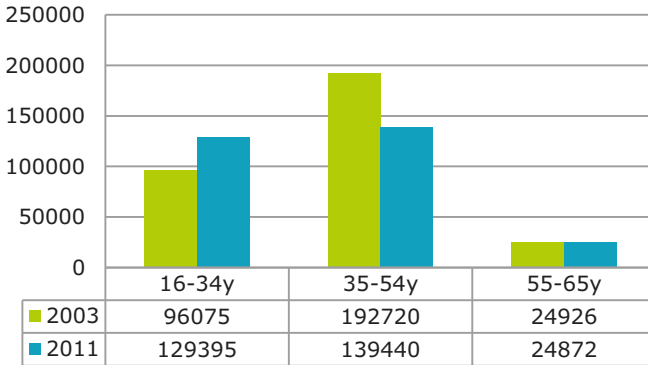


Fig. 3.7 Loss of productive work years due to new disability pensions in Finland 2003 and 2011 according to different age groups

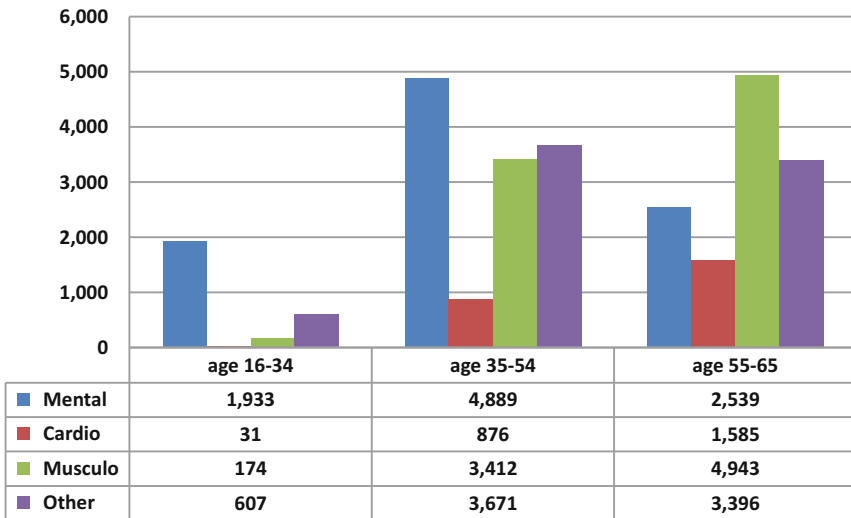


Fig. 3.8 Number of new disability pensions in Finland 2003, according to age and diagnosis

The received picture changes dramatically by introducing diagnosis as a variable. In Fig. 3.8 the number of new disability pensions according to age and diagnosis in Finland in year 2003 is presented. The figure indicates that musculo-skeletal disorders among old and mental disorders among middle-aged workers should be the primary targets for health promoting interventions. Eight years later (Fig. 3.9) musculo-skeletal disorders among aging workers has become the dominating target group, but now young people with mental disorders has raised its position.

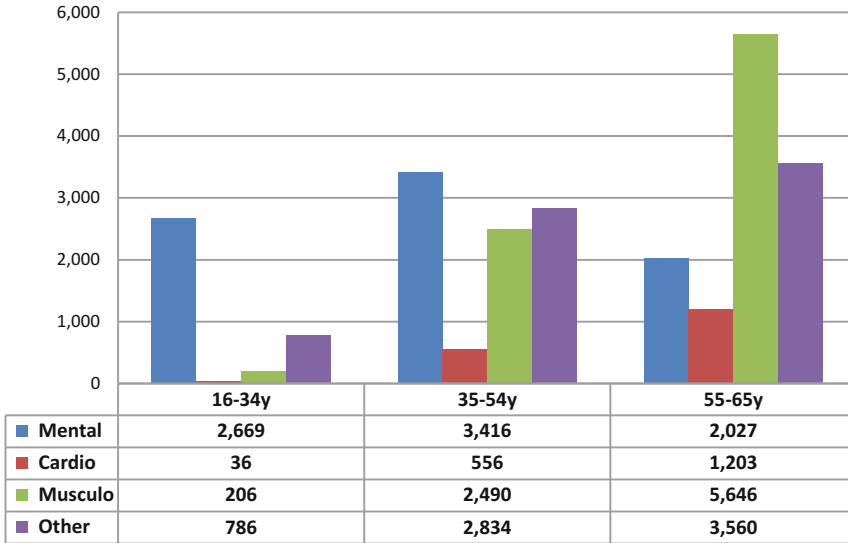


Fig. 3.9 Number of new disability pensions in Finland 2011, according to age and diagnosis

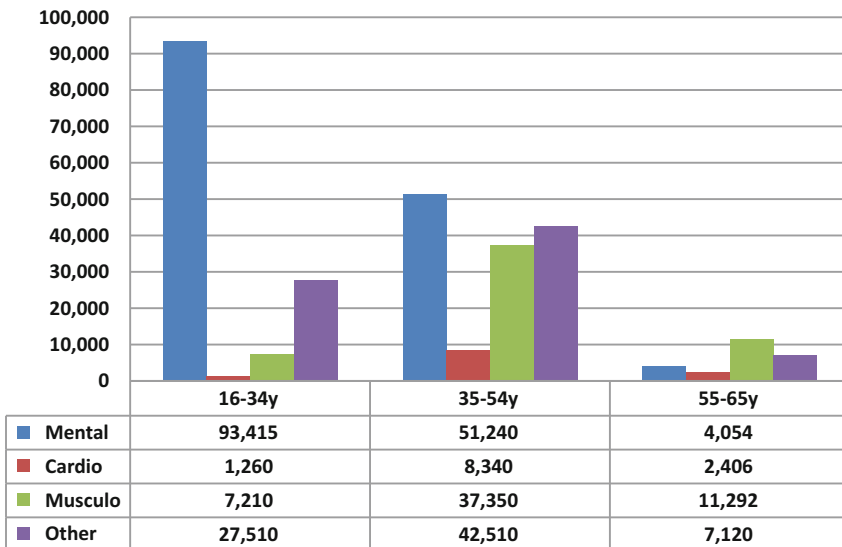


Fig. 3.10 Lost work years due to new disability pensions in Finland 2011, according to age and diagnoses

The picture changes utterly when we look at the number of work years lost due to disability pensions according to age and diagnosis. Figure 3.10 tells us that in 2011 young people with mental disorders had become clearly the most important target for health promotion interventions and the role of older workers had almost disappeared.

3.3 Discussion

The calculation above tells us that Finland lost 18.3 Billion euro in 2010 because of early retirement. Using maximum assumptions this figure gets almost doubled. Fortunately, the loss has come down from the top year 2009, when the number of new retirees was at its highest and the average pension age lower. The loss of production has come down from 14 % of GDP to 10 %, which is still astronomical if we compare, for instance with the amount of money invested in well-being at work at workplaces, which was about two Billion euro in 2010 (Aura et al. 2011), or one tenth of the annual cost of early retirement.

By looking at how the loss caused by early retirement is divided among different occupations and diagnoses of disability pension we make policy conclusions about prevention measures. A rough analysis would indicate that musculoskeletal and mental illness deserves most attention for the moment. This conclusion could be modified somewhat by the fact that many of the young retirees return to work (Helsingin Sanomat 2013). Even half of the young retirees returning to work, which has been suspected, would not change the main conclusion. When we disaggregate the figures on different age groups we get additional information. An analysis based on the number of new retirees would indicate that older workers are the most important target group of work health promotion policy. Using a loss of production approach changes our conclusions. On an aggregate level it shows that the middle aged workers are the most important group. Disaggregating the data according to age and diagnosis increases dramatically the relevance of young people with mental disorders.

The above calculations indicate that an economic approach can change the policy conclusions about the need of measures to promote work health. The approach can be criticized for being theoretical and unrealistic. Particularly it is in public debate maintained that gaining productive work years only adds to unemployment and cannot therefore be considered real gains. This has been rejected by several economists as a false assumption concerning unemployment (SOU 2013: 24). At the most, it is reasonable to reduce a share corresponding to the unemployment rate from the calculated losses and corresponding potential benefits.

The economic approach can also be criticized on ethical grounds. Is it really fair that people with more future potential working years should be favored above people who are close to pension age?

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Part II
Starting Sustainable Work Careers

Chapter 4

School Engagement and Burnout Among Students: Preparing for Work Life

Katariina Salmela-Aro and Jukka Vuori

4.1 Introduction

In the societies in the developed world, employees are required to have more theoretical and abstract knowledge than ever before. The losers in this process are low-skilled workers, whose problems begin early in basic education, where learning-related problems, school burnout and dropout from an educational path can lead to poor career motivation and performance, and ultimately poor career outcomes.

In addition to demands for higher education, modern societies also face major public health problems of stress and burnout (Levi 2005; Shirom 2003). Moreover, high demands and stress are not experienced by adults alone. Recent nationwide surveys point to dramatic increases in stress among school-aged adolescents as well (Luopa et al. 2014). At the same time, the recent economic downturn has generated many concerns about the future of today's youth. Media terms such as "the lost generation" (Atlantic) and "the generation of lost children" (New York Times) connote fears about youth coming of age in a time of foreclosed opportunity. The potential of such external economic shocks to create divergent destinies is well known (Crosnoe and Johnson 2011). Polarization threatens already at school: some flourish in the school system (Silbereisen and Lerner 2007), while others, such as those in danger of burning out and marginalization, or dropping out of society, struggle (Rutter 2012). The marginalization of those without sufficient resources to

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take advantage of educational opportunities is increasingly evident (Heinz 2009; Macmillan 2005).

This chapter conceptualizes the processes of school burnout, dropout and school engagement in the context of the school demands-resources model. At the same time, it reviews longitudinal research on school engagement, burnout and dropout from educational careers, and describes the different experiences of young people in reciprocal social contexts, such as the consequences of different experiences with parents, teachers, peers and school (Dietrich et al. 2012). This integrative approach reveals potential paths to marginalization and engagement during the key educational and school-to-work transitions. We then introduce a group intervention aimed at preventing school burnout and related dropout.

4.1.1 Young People's Health Behavior and School Dropout

School- and achievement-related pressures from school and parents significantly affect young people's health behaviors (Salmela-Aro et al. 2008a, b). Those experiencing high levels of stress are also more at risk for likely to start engaging-in health-risk behaviors. In Europe, reports of pressures due to schoolwork vary widely. In most countries, the greatest pressures are felt by 15-year-old girls at the age of 15 (WHO 2009). School-related stress both among girls and boys appears to be lowest in the Central European countries and highest in the more peripheral countries such as the Nordic countries, Mediterranean countries, some East-European countries and the United Kingdom and Ireland (WHO 2009). With respect to health-risk behaviors, substance use among youth increases significantly with age, and boys use more alcohol and cannabis. In comparison with the US, smoking seems to be at around the same level among European youth whereas alcohol use is somewhat higher and cannabis use somewhat lower than among US youth (Eaton et al. 2012; WHO 2009). The number of reported drug law offences in the EU countries increased by 36 % between 2001 and 2006. There also seems to be a clear link between drug use and criminal activity (Fergusson et al. 2002).

Many young people also experience difficulties in choosing a career and moving from education to working life. In Europe, the dropout rates from education before high school graduation vary between 4 and 31 % depending on the country. The mean dropout rate is 15 % for the EU21 countries. The corresponding rate in the US is 24 % (OECD 2011). There are many reasons for the differences between these figures, which vary according to individual characteristics, such as gender, social status and ethnicity. They also vary widely between individual EU countries.

What is worrying is that while specialized employees are increasingly being recruited into the labor markets those who drop out of education are left with increasingly fewer opportunities for employment. This leads to labor market polarization, with low skilled workers typically having no alternative to precarious conditions of employment.

On the political level, these problems have been recognized and are being tackled in many parts of the world. In Europe, the Europe 2020 strategy (Tackling early school leaving; Implementing the Youth Opportunities Initiative 18.4.2012) aims to reduce the proportion of early school leavers to less than 10 % and calls for a framework with coherent, comprehensive and evidence-based policies against early school leaving. In line with these guidelines a need has been recognized to identify, prevent and reduce the proportion of marginalized young people and those dropping out of school (Policy program 2012–2015).

In the case of Finland, international comparisons have revealed a gap between Finnish students’ academic success and their well-being at school (Unicef 2007; OECD 2011), with the result that student dropout, segregation and marginalization are now high on the country’s policy agenda. Recent research results indicate a trend towards increasing inequality and polarization among young people in Finland (Salmela-Aro and Tynkkynen 2012): some flourish (ambitious generation; see Tynkkynen et al. 2012), while others struggle, especially those in danger of societal marginalization (OECD 2011). OECD (2013) revealed that Finnish students do not like school: of the 65 OECD countries, Finland was ranked 60th regarding this question.

4.1.2 The School Demands: Resources Model

In our view (see Figs. 4.1 and 4.2, see also Salmela-Aro and Schoon 2010), an individual’s development reflects cumulative experiences and is a dynamic and multidirectional process (Bronfenbrenner 2005). In this process reciprocal influences between young people and their social contexts (peers, parents, teachers),

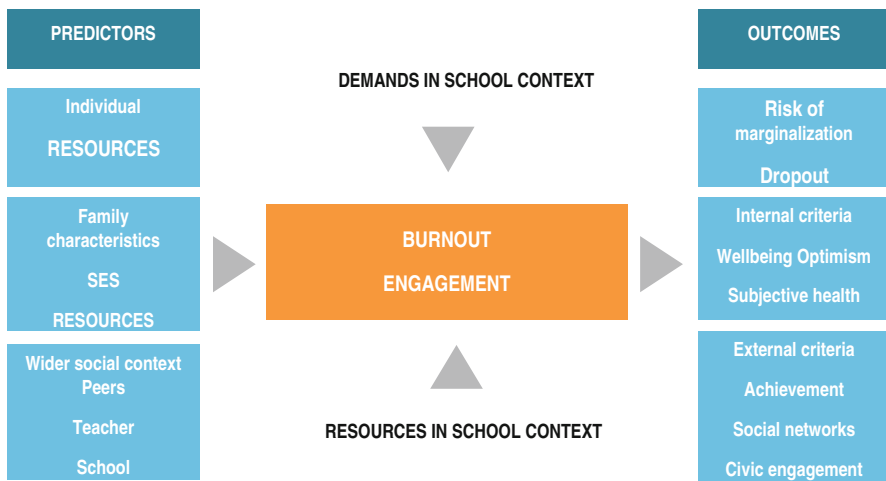
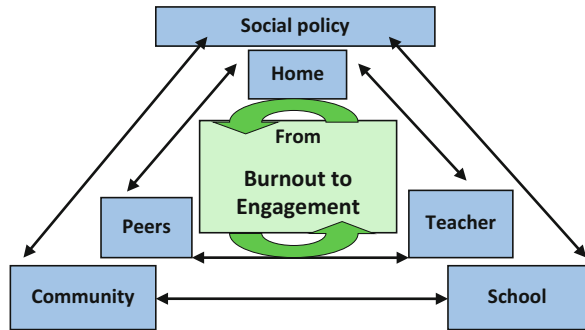


Fig. 4.1 Theoretical model: school burnout, engagement, dropout and marginalization

Fig. 4.2 School burnout and engagement



institutions, neighborhood, and community play key roles: development is bounded by social institutions and wider micro-social conditions. The key educational and school-to-work transitions challenge institutional actors as well as institutional regulators. Engagement and burnout are characterized by various behavioural (e.g., absenteeism), affective and cognitive aspects (e.g., competence beliefs with regards to school) (Fredricks et al. 2004), and hence development is approached as dynamic, multidimensional interactional phenomenon consisting of psychological, social, and socio-cultural elements. Engagement is malleable and can be shaped, and therefore holds enormous potential as a locus of intervention (Appleton et al. 2008).

The new theoretically-based model presented here is based on recently published review paper (Dietrich et al. 2012) which focuses on promoting school engagement during key educational transitions. It is also based on the recent concept of preparedness (Lent 2013; Vuori and Vinokur 2005; see also Salmela-Aro 2010; Gollwitzer 2011): mentally contrasting engagement with adversity and implementation intentions to promote engagement, beat the odds and prevent marginalization. Schools can support educational transitions by promoting positive motivation, school engagement and school success for all students by addressing four key developmental needs of young people: relatedness, contribution, competence and autonomy. Based on our results, we can increase the ability of different stakeholders to identify the true risk factors and find effective solutions. We argue that it is a cumulative process and that we should seriously listen to the voice of young people.

Although burnout is often regarded as a work-related disorder (Maslach et al. 2001), it is also a useful construct in the school context, where students core activities can be considered to be in many aspects similar with regular work. Moreover, school and the study career can be seen as a preliminary part of the subsequent work career; together these comprise the contribution each person makes to society. Consequently, the concept of burnout has been extended to both the university (Schaufeli et al. 2002) and, more recently, school contexts (Salmela-Aro et al. 2009a, 2008a, b). School burnout consists of exhaustion due to school demands, a cynical and detached attitude towards one's school, and feelings of inadequacy as a student (Salmela-Aro et al. 2009a, b; Schaufeli et al. 2002). School burnout can be viewed as a continuous phenomenon running from school-related stress to major burnout. It is a useful concept not only for describing the development of school

related stress, but also the development of cynicism and dropout. The predictive value of cynicism in school dropout has also been demonstrated empirically (Bask and Salmela-Aro 2012). Overall it seems, that school burnout is substantially rather stable over time (Salmela-Aro et al. 2009a).

4.1.2.1 Transition to Post-comprehensive Education and the School Environment

The key educational transition of adolescence in many European educational systems and a challenge for school burnout and dropout seems to be the transition to post-comprehensive education. This transition determines the quality and types of learning opportunities each student receives (Oakes et al. 1992), along with the exposure to different peers and teachers. Educational transitions contribute to school burnout because for some adolescents such transitions can be disruptive. According to the stage-environment fit theory (Eccles 2004; Eccles and Midgley 1990), adolescents' emotional, cognitive, and social needs change as they mature. Optimal development takes place when there is a good stage-environment fit between the needs of developing individuals and the opportunities afforded them by their social environments.

It might be assumed that a similar stage-environment fit also applies to adolescents' skills and capacities: adolescents might be assumed to develop optimally and to show low school burnout when the requirements of their academic environments are commensurate with their skills. Consequently, an environment that poorly matches with adolescents' needs can lead to negative motivational consequences for individuals, and therefore to school burnout (Salmela-Aro and Tynkkynen 2012). Eccles (2004) argues that schools need to change in developmentally appropriate ways. If this does not occur, adolescents disengage from school, first psychologically and then physically, as they mature during adolescence. Applying the person-environment fit theory to the developmental approach (stage-environment fit theory), Eccles and Midgley (1989) proposed that negative changes result from the fact that schools do not provide appropriate educational environments for adolescents. It has been shown that in the case of school burnout, educational transitions may represent phases of destabilization (Parker and Salmela-Aro 2011). For some youth, transitions are opportunities for positive change; for other young people, these transitions can be quite disruptive. For example, the academic track can be a risk for burnout (Salmela-Aro and Tynkkynen 2012).

4.1.2.2 School Engagement and Burnout

In turn, school engagement has recently been defined in terms of three dimensions: energy, dedication, and absorption (Salmela-Aro and Upadyaya 2012, 2014; Schaufeli et al. 2002), which are typically used in studies on work-related engagement (Hakanen et al. 2006; Salanova et al. 2005; Schaufeli 2006). This is similar to

flow, a state of mind in which the person is so intensively involved in an activity that nothing else seems to matter (Csikszentmihalyi 1990). The main difference between the concepts of school engagement and flow is that flow refers to a short-term peak experience that is unlikely to occur in school, whereas engagement is a more persistent state of mind. Because of its closeness to work-related engagement, the term 'schoolwork engagement' has been applied in the European line of research (Salmela-Aro and Upadyaya 2012; review see Upadyaya and Salmela-Aro 2013), which describes students' psychological engagement in greater detail. Of the three dimensions, *energy* refers to high mental resilience while studying, a willingness to invest effort in one's schoolwork, and a positive approach (Salmela-Aro and Upadyaya 2012; Schaufeli et al. 2002). *Dedication*, in turn, is characterized by a sense of significance, enthusiasm, pride, and inspiration regarding school, as well as perceiving schoolwork as meaningful. *Absorption* is characterized by behavioral accomplishments, being fully concentrated and happily engrossed in one's studying so that time passes quickly. These three dimensions are separate constructs of school engagement and correlate highly with each other (Salmela-Aro and Upadyaya 2012; Schaufeli et al. 2002). A recent trend has been to adopt a person-oriented approach instead of a variable-oriented approach (Bergman and Andersson 2010) to examine the individual differences among students instead of focusing on the mean level of students' engagement with school. These studies have identified several school engagement trajectories among various homogeneous student groups (Upadyaya and Salmela-Aro 2013). The results show that students' engagement with school does not necessarily decrease across the school years, but that different subgroups of students with varying levels, and developmental trends in school engagement can be identified.

Using the job demands-resources model as a guiding framework, we have documented various pathways from study demands and resources to later school engagement and burnout as well as to later life adjustment among students undergoing the transition from comprehensive school to post-comprehensive education (Salmela-Aro and Upadyaya 2014). The demands-resources model assumes two processes (Demerouti et al. 2001): an effort-driven energetic process of overtaxing and wearing out in which severe study demands exhaust the student's energy and lead first to burnout and then to diminished mental health manifested in such forms as depression. The other is a motivational process in which the availability of resources leads to engagement and fosters life satisfaction. The more study demands students experience, the more they suffer from school burnout later on. In turn, the more study resources they experience, the more engaged they are towards their schoolwork later on. Personal resources, such as self-efficacy, predict higher engagement and lower level of burnout. Burnout predicted decreased engagement 1 year later. School burnout and engagement can also spill over to other life areas: engagement predicts life satisfaction, while school burnout predicts depressive symptoms (Salmela-Aro and Upadyaya 2014).

4.1.2.3 Personal Resources and Developmental Trajectories

According to the demands and resources model, several resources such as high self-esteem and efficacy, and demands such as work or study challenges and overload promote or hinder engagement (Demerouti et al. 2001; Salmela-Aro and Upadyaya 2012). These processes can be described as motivational or energy-consuming processes, depending on the level of the demands made on, resources available to, and engagement, burnout symptoms, and well-being experienced (Hakanen et al. 2006). As a whole, highly school-engaged students typically follow an overall positive youth development trajectory. They produce high academic outcomes, possess a mastery-oriented approach to studying, seldom drop out of school, adapt better to challenging situations, spend their time out of school in constructive activities, and experience overall better well-being. Consequently, in some cases, the transition to higher education or work may offer a new start and a better fit, and lead students to return to the more benevolent pathway of youth and young adult development (Upadyaya and Salmela-Aro 2013). Moreover, optimistic achievement strategies and their increase during university studies predict subsequent work engagement. In turn, pessimistic and self-handicapping achievement strategies and their increase during university studies predict work burnout (Salmela-Aro et al. 2009a, b). These results reveal the key role of personal resources for a sustainable work career. Future studies should also examine the role of the ratio of demands to resources and to examine whether personal resources can buffer the impact of demands in situations where these are very high.

In addition, the interpersonal context and interpersonal resources play an important role in school burnout and engagement. Burnout has been found to be shared in family (Salmela-Aro et al. 2011) and among peers (Kiuru et al. 2009). In addition the more time pressure students experience in school, the greater the burnout, and the fairer and more motivating students perceive teachers to be, the lower the burnout they report. Moreover, the better the options for counseling and support offered by the school, the less burnout there is in the school (Salmela-Aro et al. 2008a, b). Social strategies also play a key role for later work engagement and burnout. Increase in optimistic social strategies during university studies predict work engagement. In turn, avoidance social strategies and their increase during university studies predicted burnout in working life early during the career.

4.2 The Towards Working Life Intervention to Promote Engagement and Prevent Burnout

Although educational transitions include several risk factors for student engagement (Roeser et al. 1999), they also offer opportunities for change and possible interventions. One possibility is to boost students' transition efficacy and related resources, and to provide them with information on the opportunities and challenges

of further education and career opportunities prior to their transition to vocational studies, higher education, or work. Such preparedness (Lent 2013; Salmela-Aro et al. 2012; Vuori and Vinokur 2005) enhances students' subsequent engagement and the value they attach to educational goals, and helps them in adjusting to their upcoming educational transition (Vuori et al. 2008).

The Towards Working Life group method was designed at the Finnish Institute of Occupational Health (FIOH) to promote the transition to upper secondary level or vocational studies, to prevent school burnout and dropout, and to enhance mental health among students finishing their basic education.

4.2.1 The Design of the Group Intervention

The main goal of the group intervention was to increase career choice preparedness among the students graduating from basic education. Career choice preparedness means here the readiness of a student to engage successfully in career choice activities and deal with setbacks and barriers in this area (Koivisto et al. 2011). Here, it has been operationalized as the intertwined combination of career choice self-efficacy and inoculation against setbacks (Koivisto et al. 2011; Vuori and Vinokur 2005). The concept of career choice self-efficacy refers to the degree of confidence in one's ability to successfully engage in tasks related to career choice (Bandura 1986; Ajzen 1991). Inoculation against setbacks refers to anticipatory stress management skills, which help students maintain proactive behavior and mental well-being in face of setbacks and barriers (Meichenbaum 1985; Sweeny et al. 2006). It was assumed that increased career choice preparedness would enhance students' educational career choices and mental health. It was further assumed that this preparedness would subsequently increase school engagement and decrease burnout.

The Towards Working Life workshops each last a total of 15 h, held over 4 or 5 days. Typically, the groups have about 20 participants and each workshop has 2 trainers. The implementation of the intervention is described in detail both in the trainer's manual and in the participant's workbook (Vuori et al. 2006a, b).

In the workshops, the participants design concrete career plans for themselves. The workshop themes are the following: defining personal strengths and interests, transferable skills, educational options and professional careers offered in society, recognizing and using institutional resources, guidance, social networks, and sources of information, life-long learning, barriers and setbacks, and visiting a local labor office (Vuori et al. 2008).

4.2.1.1 Implementation of the Intervention in School Settings

In order to test the effects of the intervention on school engagement and burnout, a field experimental study (RCT-study) was carried out in 11 comprehensive schools during 2003–2005 among 1,034 participants (Vuori et al. 2008). The intervention achieved its primary goal: the workshops significantly increased career choice

preparedness among the participating young students (Koivisto et al. 2011). The Towards Working Life workshops also increased adolescents' internal motivation towards education-related goals (Salmela-Aro et al. 2010). This is an important result and shows that the workshops had a beneficial effect on participants' motivation for further studies.

The workshops seemed to have the effect of redirecting students without learning difficulties more towards upper secondary studies, at the cost of vocational college studies, were those with learning difficulties more towards vocational college studies. However, among both groups these findings did not quite reach statistical significance (Vuori et al. 2008).

The intervention had a significant interaction effect on mental health. Among those with risk for depression, participation in the workshops decreased their level of depressive symptoms. Moreover, workshop participation significantly reduced school burnout among participants who had learning difficulties or dyslexia and were also initially at risk for depression. This may be because they made better choices for their further education. Earlier research has demonstrated that among students with learning difficulties, school burnout increases, if they transit from basic education to upper secondary studies on an academic rather than vocational track (Kiuru et al. 2011a, b). In fact, the workshop seemed to redirect participating students with learning difficulties more towards vocational studies (Vuori et al. 2008).

Overall, even if the main effects of the group intervention appeared relatively small in scale, they were significant in important subgroups of students. This suggests that it might be a good idea primarily to target the intervention to high-risk students (Vuori et al. 2008).

The mediating mechanisms of the workshops could be seen in the ways in which the students' career-related networks changed. The density of the participants' career network decreased, meaning that the students' networks became less interconnected. This might have had important implications for their decision making and career planning, as less dense networks facilitate access to important new career information (Burt 1992; Jokisaari and Vuori 2011). They also received very valuable, trustworthy expert adult advice during their career planning, manifested in the increased numbers of school counsellors in the career-related networks of the group participants (Blustein et al. 1997; Jokisaari and Vuori 2011). Peer-group effects seemed to weaken the effects of the group intervention (Kiuru et al. 2011a, b), showing how central role peer groups have in moderating the effects of career choice training and in standardizing group thoughts and behavior regarding future career plans.

While the workshops significantly increased both career choice preparedness and positive attitude toward career planning, further structural analyses revealed how these outcomes were linked: the beneficial effect of the workshops on positive attitude toward career planning was mediated by enhanced career choice preparedness (Koivisto et al. 2011). Key educational transition periods seem to be windows of opportunity for changes in burnout and engagement. These are also ideal places to carry out interventions to boost transition preparedness and school engagement.

4.3 Suggestions for Further Research

This chapter addressed school work engagement and burnout processes in the context of the school demands-resources model. Schoolwork engagement was conceptualized as study-related vigor, absorption and dedication, whereas school burnout was defined as exhaustion, cynicism and feelings of inadequacy as a student. Dropout from school could be seen as one of the consequences of the burnout process.

The three theoretical models – the demands-resources model, engagement model and burnout model – have earlier been widely used in describing occupational health among employees. However, these models can also be usefully applied to the schoolwork of students prior to their transition to working life. For students, schoolwork is their work, and it shares many features with regular work in the labor markets. Using similar conceptual models at both sides of the school-to-work transition brings these two areas of life closer to each other and facilitates research on this topic. The use of these models might also promote a new type of research on this particular transition. Traditionally, researchers have either studied the developmental, schooling side of the transition or the occupational, work- and health-related side of the transition.

There is need to examine more in detail how school burnout and school dropout processes can be prevented, either by changing the educational environment or enhancing student resources and career choice preparedness. At the same time, little is known as yet about ways to enhance school engagement and so promote better educational outcomes. Future research might also investigate how it is that some at-risk students choose developmental pathways that lead away from risks, and remain resilient to risks. This would enable us to better understand students who succeed even in the face of difficulties. New topics for research across the school-to-work transition might include investigation of the possible predictive relationship between well-being at school and wellbeing at work and the effects of educational interventions during schooling on well-being at work.

4.4 Practical Conclusions

The transition to post-comprehensive education seems to be a focal educational transition affecting school burnout trajectories and dropout. Educational transitions may be disruptive for some adolescents, leading to unwanted difficulties if schooling does not change in developmentally appropriate ways along with maturation (Eccles 2004). Similarly, a school environment that shows poor fit with the skills and knowledge of students may have negative motivational consequences leading to school burnout and even dropout (Salmela-Aro and Tynkkynen 2012). One practical solution might be the utilization of information technology devices in education. In many countries young people spend a major part of their time in internet-based

social networks and other computer-based realities. It would be advantageous for education if these kinds of experiences and environments could be adapted for use in school work and learning. This would also increase the face validity of the educational system in the eyes of young students.

Another approach to enhancing student-environment fit could be to develop students' resources so as to enable them to make better educational choices for their future. By increasing students' preparedness for career choice, it seems to be possible to enhance their internal motivation towards their educational goals (Salmela-Aro et al. 2010). This would result in more appropriate career choices and decreased school burnout. Moreover, if preparedness is enhanced in peer groups, the benefits will be strongest among the at-risk groups (Vuori et al. 2008). The results reported here clearly demonstrate how an increase in individual preparedness can prevent a significant proportion of the detrimental outcomes of the burnout process among at-risk students and set the stage for the possible development of engagement through increased internal motivation for studies. Schools would be the ideal site for this kind of preventive work, which would also have a beneficial impact on the educational outcomes.

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Chapter 5

Practice Makes Perfect? Antecedents and Consequences of an Adaptive School-to-Work Transition

Jos Akkermans, Mikko Nykänen, and Jukka Vuori

5.1 Introduction

A major work-related transition that individuals go through in the beginning of their career is the *school-to-work transition (STWT)*. During this transition young individuals face many challenges and changes in a relatively brief period of time, such as developing a professional identity (McKee-Ryan et al. 2005), finding suitable employment (e.g., Scherer 2004), and going through the organizational socialization process (Koivisto et al. 2007). The STWT is more relevant now than ever because of increasing demands for flexibility and career self-management (e.g., Akkermans et al. 2013c), and because the worldwide economic crisis of the past years has struck young employees hardest of all (European Commission 2012). Therefore, this chapter focuses specifically on this transition. First, we will discuss recent trends with regard to employment statistics of young workers in Europe. Second, we will focus on known antecedents and consequences of an adaptive STWT. Next, we will discuss the new career perspective, and examine two emerging topics; *career adaptability* and *career competencies*. Finally, we will present two cases in which the CareerSKILLS method in The Netherlands, and the School-to-Work Group Method in Finland will be detailed.

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5.2 Young Employees on the Labor Market

Transitions of young people into the labor markets differ across countries. Career trajectories of young people are influenced by contextual factors such as the national characteristics of the educational system, employment system, and the overall state of the economy. In many European countries such as the Netherlands and Finland, young adults are directed after primary school either to an academic track in secondary education that focuses on preparation for higher education, or to a vocational secondary education track where the emphasis lies on learning more practical and work-specific skills in certain occupational field. Many other countries offer mainly general secondary education, whereby vocational training is primarily obtained on the job. In some cases, the teaching of vocational skills is shared between vocational schools and the workplace, such as in the apprenticeship system in Germany (Müller and Gangl 2003; Wolbers 2007). The basic premise is that institutional settings, such as vocational specificity of the education system and the extent to which students are placed in different educational tracks, affect the STWT of young adults. However, there are many psychosocial factors that are similar across countries with regard to antecedents and consequences of an adaptive STWT. This implies that, although we take the European context as our starting point, we expect that many of the theoretical insights and practical implications are also applicable to a larger international context.

One of the main criteria for an adaptive transition to the labor market is attaining employment (i.e., job quantity). Therefore, unemployment ratings are an often used criterion for judging the current status of employees on the labor market. General unemployment in the European Union is 11 %, and has increased in 16 out of 28 member states (Eurostat 2013). This is a 4 % increase since 2008. Compared with the United States (7.2 %) and Japan (4.9 %), Europe has high unemployment rates. The economic crisis has struck young persons the hardest: since 2008, the unemployment rate of young individuals in Europe has increased by 12 % to a total of almost 28 % (Eurostat 2013). Moreover, newcomers graduating in bad economies are more likely to experience a job mismatch and to suffer from underemployment (Kahn 2010). Indeed, 17 %, or 1.6 million young persons, were underemployed in 2012, compared with a 12 % rate among older workers (Eurostat 2013). This is a worrying statistic, as the negative health effects of underemployment have been shown to be very similar to those of unemployment (McKee-Ryan and Harvey 2011). Table 5.1 shows an overview of unemployment statistics between 2008 and 2013.

We can conclude that young workers are currently facing difficult circumstances during the STWT. The statistics also show us that educational level is the best insurance against unemployment among young workers in all EU states (Eurostat 2013). This is further illustrated by the fact that in 2009 young workers with lower levels of education needed on average 10 months to find their first job, whereas those with high levels of education needed 5 months. Of those young workers who have entered the labor market in the past 5 years, 84 % with high educational levels have found a job, compared with 45 % of those with lower educational levels (Eurostat 2013). These differences are also reflected in earning rates: the lower the educational level, the higher the chance of being a low-wage earner.

Table 5.1 Unemployment statistics in the EU-28 between 2008 and 2012, both for the general working population and the young (<25 years) working population

Unemployment statistics	2008	2012	2013	Increase 2008–2013
<i>EU-28 general population</i>				
Unemployment numbers	16.924.000	25.520.000	26.872.000	9.948.000
Unemployment rate	7.1 %	10.5 %	11.0 %	3.9 %
<i>EU-28 young population</i>				
Unemployment numbers	4.253.000	5.617.000	5.580.000	1.327.000
Unemployment rate	15.8 %	23.0 %	27.8 %	12.0 %

If we combine the above statistics with the currently increasing certificate demands, little job security, and increasing differences between educational groups (Akermans 2013), it is safe to conclude that young workers with lower educational levels face a difficult challenge when going through the transition from their vocational schools to the labor market. At the same time, this is a group that has been understudied in the scientific literature both in Europe and the United States (Akermans et al. 2013b; Ling and O'Brien 2012). Therefore, it is important to analyze what we know about the STWT: what can adolescents do to prepare for an adaptive transition to the labor market, and what are the characteristics of an adaptive transfer? We will attempt to answer these questions next.

5.3 Realizing an Adaptive School-to-Work Transition

Research on the transition from school to work has a long tradition stemming from the 1940s. Although labor markets and careers have drastically changed since then, many of the early work on the STWT is still similar to contemporary studies. Common themes included the effects of high school behaviors and results on adaptation to the world of work, and lifespan perspectives of periods that individuals go through when building their careers. A lot of this early work is still relevant in today's much more dynamic labor markets. We will now shift our focus by looking at antecedents, characteristics, and consequences of a successful transition from school to work.

5.3.1 Preparing for an Adaptive School-to-Work Transition

In the past two decades a lot of research has been performed to examine antecedents of an adaptive transition from school to work. Those studies all seem to agree on one thing: a good preparation is a key ingredient to success in transitioning to the world of work (e.g., Koivisto et al. 2011). The question then becomes: what exactly is a good preparation, and which elements can be distinguished in the literature?

5.3.1.1 Developmental Issues and Family Influences

Up until the 1990s, research had spent little attention to developmental issues in examining the STWT (Pinquart et al. 2003; Savickas 1999). However, in recent years scholars have increasingly emphasized the importance of early developmental processes. For example, Bynner (1997) demonstrated that children who experience problems in developing basic literacy and numerical skills by age 10 show reduced school achievements and development of work-related skills, which subsequently has a negative influence on the transition from school to work. Adolescents who experience depressive feelings and who indulge in substance use are also at risk for adaptive problems during the STW transition, for example by not being able to attain employment and experiencing feelings of disconnection (Ling and O'Brien 2012; Määttä et al. 2002). Family influences play a key role in buffering these risk factors and in stimulating an adaptive STWT. Parents provide adolescents with financial, emotional, and/or motivational support (Settersten 2005), and a positive parent-youth relationship can contribute to a better preparation for the STWT (Ling and O'Brien 2012). Moreover, parental educational and income level are directly related to the chances of an adolescent's adaptive STW transition (Blustein et al. 2002). Further underlining the importance of developmental issues and family influences is that empirical evidence suggests that work beliefs and attitudes are, at least in part, shaped by children's and adolescent's perceptions of their parental work attitudes, experiences, layoffs, and job satisfaction starting from the age of about 7 to 8 years (Barling et al. 1998; Loughlin and Barling 2001).

5.3.1.2 School Performance and Education

Adolescent's performance at school and educational experiences have often been shown to be an important predictor of a successful transition to working life. Not only is school performance one of the most important criteria of selecting applicants for a job (Coles 2000), but students with better performance at school have higher career-related motivation and aspirations, and are more likely to find a job that is congruent with their personal interests (Vinokur and Schul 2002). Moreover, worse performance at school can lead to unemployment and failure to obtain a fulltime job (Pinquart et al. 2003; Saks and Ashfort 1999). In the introduction section of this chapter we already argued that young individuals with lower educational levels face an even more difficult transition to the labor market than their highly educated counterparts, for example because of higher unemployment rates, longer job searches, and lower wages. These statistics are corroborated by various empirical studies, which have found that adolescents with low educational levels experience more problems during the STWT, and are less likely to hold stable and long-term employment (Ling and O'Brien 2012; Yates 2005).

5.3.1.3 Adolescent Work Experience

Research on the role of adolescent's work experiences in a successful transition to work shows that these experiences are generally positive and a necessary component of preparing for the labor market (e.g., Pinquart et al. 2003). Although some scholars have argued that work experiences can lead to substance use and increased delinquency (Greenberger and Steinberg 1986), and that the majority of teenage work is routine and alienating (Garson 1988), recent studies have all demonstrated the importance of early work experience in career, and skills and abilities development (Cohen-Scali 2003; Zimmer-Gembeck and Mortimer 2006), thereby facilitating the STWT. Indeed, internships help crystallize students' vocational interests and help them prepare for inevitable disappointments during their first jobs, as well as give them a realistic preview of actual jobs (Feldman et al. 1998). Furthermore, the number of hours worked and the number of jobs held in adolescence were strong predictors of an adaptive STWT (Ling and O'Brien 2012).

5.3.1.4 Self-Efficacy, Goal Setting, and Preparedness

Young people who have a higher sense of competence are more likely to find a job after graduating from school, and are less likely to drop out of an occupational field (Feather and O'Brien 1986; Saks 1995). Indeed, self-efficacy beliefs, characterized as peoples' judgments of their capacity to execute a designated performance, are a strong positive predictor of career interests, career-related values, goals, career-related behaviors, and career performance (Lent et al. 1994). Because individuals with a high sense of self-efficacy employ more active coping behaviors (Bandura 1997) and have a stronger belief in their ability to overcome obstacles (Saks 1995), self-efficacy can increase adolescents' preparation for the STWT. In addition, it has been suggested that the higher an individual's perceived efficacy to fulfill educational requirements and occupational roles, the better they prepare themselves for their career (Bandura et al. 2001). Perceptions of efficacy are even more important when combined with active personal goal setting (e.g., Nurmi et al. 2002). Young individuals are faced with many choices and challenges when preparing for the STWT and personal goals can help them focus their energy and resources, and develop strategies for dealing with this transition (Nurmi et al. 2002). Nurmi et al. argued that success during the STWT requires (1) a high level of interest in personal goals, (2) perceptions of efficacy to attain those goals, and (3) positive emotions that motivate behavior towards attainment of those goals. They showed that young individuals who appraised their personal goals as important were more likely to find a job congruent with their educational level and personal interests than those who did not rate their goals as important. In the more unpredictable current labor markets, even good self-efficacies and goal setting are not always enough. Lent (2013) has suggested that career-life preparedness as a resilience building dimension helps in difficult developmental career transitions. In addition to self-efficacies it comprises inoculation against setbacks. Preparedness is different from preparation, as young

people may prepare to enter work life without adequate preparedness (Lent 2013). The importance of preparedness in getting employment and its distinction from preparation has been demonstrated in earlier studies (Koivisto et al. 2011; Vuori and Vinokur 2006).

Summarizing the above, there are various ways promote preparation of young individuals making the STWT. Research has shown how this preparation can start during childhood, and continue by performing well at school and obtaining relevant work experience during adolescence. Finally, young people who are highly efficacious, set clear personal goals, and have a high level of preparedness, are likely to experience a successful transition to the labor market. Our next step is to examine the STWT itself, and the characteristics and consequences of an adaptive transition to working life.

5.3.2 *Characteristics and Consequences of an Adaptive School-to-Work Transition*

Even when young individuals prepare themselves well, the transition itself comes with its own challenges. A successful STWT has important implications on (1) an individual level, for example by attaining employment and career satisfaction, (2) an organizational level, such as the amount of training needed and the amount of turnover among newcomers, and (3) a societal level, for instance a long-term effect on employability and the degree of demand for government-subsidized vocational counseling (Feldman et al. 1998; Morrison 2002; Neumark 2006). However, young individuals who remain unemployed and experience prolonged job search efforts eventually diminish their efforts to find employment, which subsequently decreases their chance of finding a job (Aaronson et al. 2010). This implies that a negative spiral of discouragement and reduced career success may develop when young individuals are not well prepared for setbacks and barriers, and they do not experience an adaptive STWT. Therefore, it is crucial to examine characteristics and consequences of a successful transition to working life.

5.3.2.1 *Quantity, Quality, and Stability*

An adaptive transition from school to work may be divided into three main components: *job quantity*, *job quality*, and *job stability*. Job quantity, that is attaining employment, has often been used to define a smooth STWT (e.g., Taylor 2005). Finding employment has benefits on many different levels. Societal benefits of young individuals who find employment are reduced costs of unemployment and economic returns of a healthy labor market. For organizations, it is important to gain talented young workers to attain and maintain their competitive advantage. On an individual level, finding a job can lead to increased self-esteem and reduced depressive symptoms (Wald and Martinez 2003), increased work-related achievement

beliefs (Nurmi et al. 2002), and an increased likelihood of being employed in later years (Koivisto et al. 2007). Conversely, youth unemployment can lead to mental health problems (Wald and Martinez 2003), psychological distress and depression (McKee-Ryan et al. 2005), and reduced career success (Koivisto et al. 2007).

Job quality is a second important characteristic of an adaptive STWT. It is crucial for young people to find high-quality employment, as one's first job can determine future vocational outcomes and career success (Ng and Feldman 2007). Moreover, job quality is related to increased job satisfaction (Stone and Josian 2000), work socialization, career development, and increased mental health (Saks and Ashfort 2002). If young individuals do not find high-quality employment, this leads to an underutilization of human capital on the labor market, which can result in decreased work commitment and job involvement (Feldman and Turnley 1995). In addition, a lack of job quality can hinder the development of vocational skills, reduce well-being, and foster negative work-related attitudes among young individuals (Koivisto et al. 2007). It can also lead to increased cynicism and reduced work-related motivation (Stern et al. 1990), and to higher depressive affect and lower work values (Feather and O'Brien 1986). Dooley and Prause (1997) even argued that the correlates of poor job quality are more similar to unemployment than to adequate employment.

A third indicator of an adaptive STW transition is job stability. Although this indicator has not been studied as extensively as job quantity and job quality, early employment stability may have beneficial effects (Zimmer-Gembeck and Mortimer 2006). Indeed, not being able to settle in a stable employment relation may represent an unproductive STWT, as temporary jobs often lack adequate pay and learning opportunities (Yates 2005). However, findings on the effects of job stability during the STWT have been scarce and inconclusive (e.g., Ling and O'Brien 2012), and it may not be as relevant as job quantity and job quality because young individuals generally need at least 5 years before they attain stable employment (Yates 2005).

5.3.2.2 Vocational Congruence

Apart from job quantity, job quality, and job stability, another concept that has often been studied as indicator of a successful STWT is the so-called *person-job fit* and, by extension, the *person-organization fit*. A lot of scientific work regarding this fit has been based on the personality-job fit theory developed by Holland (1985). According to this theory, individuals need to match their personality characteristics with their jobs. When fit occurs between personality and employment, turnover is reduced and satisfaction is increased. In addition, the congruence between an individual's occupation and their career aspiration is an important source of vocational satisfaction, stability, and achievement (Holland 1985). A theory with a similar proposition is the theory of work adjustment (Dawis 2005). According to this theory, individuals strive to achieve a work environment that is congruent with their personal attributes. To the extent that individual needs are met and individual abilities are used in an occupation, job satisfaction and job performance will increase. In

essence, both the personality-job fit theory and the theory of work adjustment state that an adaptive STWT reflects a high level of congruence between personal attributes and the characteristics of a job. These assumptions are corroborated by empirical findings that the match between person and job environment is an important antecedent of job satisfaction and work-related wellbeing (Koivisto et al. 2007). Moreover, a bad person-job fit can have serious negative impacts on future vocational trajectories, and it can compromise building a career that matches a person's educational level (Scherer 2004).

5.3.2.3 Individual Attributes

Several scholars have suggested that an adaptive transition to working life is first and foremost a result of stable individual characteristics. Success during the STWT would depend upon differences in individual abilities, values, attachment styles, and personality traits (e.g., Bradley et al. 2002; Määttä et al. 2002). Two often mentioned individual characteristics in this regard are self-efficacy and locus of control. As argued earlier in this chapter, a high sense of self-efficacy is an important aspect of preparing for the STWT. In addition, individuals with higher self-efficacy also have higher career aspirations, set higher career goals for themselves, will exert more energy to achieve those goals, and experience the STWT as less stressful (Lent et al. 1999; Pinquart et al. 2003). Moreover, high self-efficacy is related to higher career-related motivation and to objective and subjective career success (Vinokur and Schul 2002). Combined with the individual attribute of preparedness, self-efficacy has been demonstrated to predict successful employment both among youth and adults (Lent 2013; Vuori and Vinokur 2006). Young individuals with an internal locus of control, that is, who believe that they control their own behaviors as opposed to being controlled by environmental influences, are more likely to find a job that fits their career aspirations (Luzzo and Ward 1995). However, an internal locus of control can also backfire as individuals who attribute failures to themselves rather than to external events are more likely to experience reduced psychological wellbeing during the STWT (Määttä et al. 2002). Generally speaking, those individual attributes that promote alertness, independence, perseverance and proactivity are assumed to be important in attaining success during the STWT (Kammeyer-Mueller and Wanberg 2003). In addition to these personality characteristics, Ng and Feldman (2007) argued that young individuals who go through the STWT have to switch between two salient role identities: student and worker. According to Ng and Feldman, success in the transition to working life requires individuals to change from a student role identity to a worker role identity as the core life role. Building on the personality-job fit theory (Holland 1985) and the theory of work adjustment (Dawis 2005), the work role identity perspective argues that an adaptive STWT requires (1) a good fit between organizational environments and individual's needs and abilities, and (2) a good fit between organizational environments and multiple role identities (Ng and Feldman 2007). Taken together, personal characteristics are an important aspect of a successful STWT, especially when matched with a fitting work environment.

5.3.2.4 Demands and Resources

Although the STW transition is full of turmoil and important changes, it also involves many positive experiences for young adults (Arnold 1997). That is, the transition to working life encompasses both positive and negative experiences, and some experiences can even be positive and negative at the same time (Elfering et al. 2007). For example, having to deal with new job requirements can be a positive experience of challenge, as well as a negative experience of overload. Elfering et al. (2007) found that an increase in responsibility and decision latitude, a changing of roles, and financial issues were the most prominent characteristics during the initial transition to the labor market. They also demonstrated that increasing demands at work were a prominent issue that stayed salient over a longer period of time, possibly because it takes young workers several years to develop an expertise. Another crucial factor in a smooth STWT is the amount of social support young adults receive, both in their work and outside of work (e.g., Bynner and Parsons 2002). Similar to the work of Elfering et al. (2007), Akkermans (2013) argued that the resources and demands that young individuals experience can have a profound impact on their wellbeing and career development. Akkermans et al. (2009, 2013b) found that autonomy, social support of colleagues and supervisors, and opportunities for development are important resources, whereas a high work pressure, emotional workload and physical workload were prominent demands that influence wellbeing, health, and performance of young workers. In addition, it seems that job characteristics may work in a unique way for young workers with vocational educational training. Task variation, generally assumed to be a resource, turned out to be a stressor for young workers, whereas mental demands, generally considered a stressor, turned out to be a resource. In other words: young adults with vocational education need challenging, but clearly defined tasks in their first jobs. Another finding was that young individuals with lower levels of education experience fewer job resources and more physical demands compared with their highly educated counterparts. However, these resources are especially important for them as they have a clear positive impact on their wellbeing and work engagement, and subsequently on their health and performance (Akkermans et al. 2009, 2013b). Akkermans (2013) therefore concluded that it is crucial to provide sufficient resources to vocationally educated young workers who are going through the STWT.

Taken together, we can conclude that attaining high-quality and stable employment are important characteristics of being able to adapt to working life. In addition, it is crucial that young adults match their individual characteristics to a fitting work environment, in order to attain congruence. Finally, the presence of certain demands and resources at work can either hinder or stimulate an adaptive transfer to work. The previous sections have dealt with antecedents, characteristics, and consequences of the STWT. However, one key part of the puzzle is still missing: the changing career. Therefore, in the next section we will examine the *new career* paradigm and two concepts that could prove to be valuable additions to research on the STW transition: career adaptability and career competencies.

5.4 The New Career and the School-to-Work Transition

5.4.1 *Characteristics of the New Career*

During the past few decades, many changes have become apparent on the labor markets. Employees need to become ever more flexible and self-managing, and they have to adjust to having more complex careers (Vuori et al. 2011). In line with these developments, the traditional career, which has been characterized as a linear path with vertical growth only within the hierarchical levels of a particular organization, is slowly being replaced by the so-called new career. In the new career, individuals need to proactively self-manage their careers, and they develop their career through horizontal and vertical shifts between different organizations (Akkermans et al. 2013a). Managing this new career may be especially difficult for young adults who are transitioning from school to work, as they already experience many challenges and changes in a relatively brief period of time. Preparation for and adaptation during this phase may therefore become even more important. In order to have a successful start of their working lives, they may need to master *career adaptability* and *career competencies*. We will analyze these concepts next.

5.4.2 *Career Adaptability and the School-to-Work Transition*

In the complex new career it is crucial that young individuals are equipped with the necessary resources to cope with the STWT in order to promote sustainable employability and career success. Young adults need to be ready to take advantage of opportunities and deal with barriers and setbacks, which are partly reflected in the concept of career adaptability (Savickas and Porfeli 2012). Savickas (1997) defined career adaptability as “the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by the changes in work and work conditions” (p. 254). According to Savickas and Porfeli (2012), it consists of four psychosocial resources, or competencies, that help individuals manage career transitions: (1) looking ahead at one’s future and planning (*career concern*), (2) knowing what career path to pursue and making responsible decisions (*career control*), (3) looking at alternatives and seeking strategies (*career curiosity*), and (4) having the confidence to undertake activities and being able to overcome obstacles to pursue career goals (*career confidence*). An important assumption of career adaptability is that these four resources can be developed over time (Koen et al. 2012; Savickas and Porfeli 2012). Career adaptability may be especially useful for young adults who go through the STWT as it prepares them for inevitable changes and setbacks, and it equips them with the necessary tools to thrive during this turbulent phase in their lives.

Research has indeed demonstrated the positive effects of career adaptability. It is both related to job quantity (Zikic and Klehe 2006), job quality (Koen et al. 2010),

and wellbeing and career success (Hirschi 2010). In addition, adolescents high in career adaptability are more successful in attaining an adaptive STWT and have a lower chance of prolonged unemployment (e.g., Germeijs and Verschueren 2007). Finally, career adaptability can serve as an important preparatory mechanism for reemployment (Koen et al. 2010) and for finding a higher quality job (Koen et al. 2012). It is clear that young adults are better prepared and more adaptable during the STWT when they master the four career adaptability resources.

Closely related to career adaptability is preparedness, which we discussed above. Similar to the theory of Savickas (1997) on career adaptability, the suggestions of Lent (2013) with emphasis on preparedness and resilience are also very relevant in current unpredictable and challenging labor markets. Koivisto et al. (2007) demonstrated an increase in employment, its quality, and wellbeing after increasing preparedness among graduates of vocational schools (see the Cases section below).

5.4.3 Career Competencies and the School-to-Work Transition

Similar to the concept of career adaptability, research on *career competencies* has focused on preparing employees to proactively self-manage their careers in the changing world of work. However, whereas career adaptability is primarily about being able to adapt to constant changes, career competencies seem to me more in line with theories of congruence. That is, mastering career competencies can help individuals match their personal competencies with those necessary for a successful career, as well as develop the competencies needed to thrive in today's dynamic labor market. Akkermans et al. (2013a) recently reviewed the available literature on career competencies and developed a framework of competencies specifically for young individuals. They defined career competencies as "knowledge, skills, and abilities central to career development, which can be influenced and developed by the individual" (Akkermans et al. 2013c, p. 249). Furthermore, career competencies are considered different from personality (e.g., proactive personality) and contextual (e.g., mentoring) characteristics, and they are considered to be malleable. The career competencies that are most crucial for young individuals can be classified into three dimensions: reflective, communicative, and behavioral career competencies, which each consist of two competencies (Akkermans et al. 2013a, c). Reflective career competencies include *reflection on motivation*, which refers to reflection on values, passions, and motivations about one's career, and *reflection on qualities*, which relates to reflection on strengths, shortcomings, and skills. Communicative career competencies encompass *networking*, which pertains to the awareness of the presence and professional value of one's network, and the ability to expand it for career-related purposes, and *self-profiling*, which refers to presenting and communicating one's knowledge, abilities, and skills to the internal and external labor market. Finally, the behavioral career competencies are *work exploration*, which refers to actively exploring work-related and career-related opportunities, and *career control*, which relates to actively influencing learning and work processes related to

one's career by setting goals and planning how to fulfill them. In short, mastering career competencies enables young individuals to be prepared for the transition to working life, it equips them with necessary competencies to face the challenges they face, and it allows them to continuously learn during their early career.

The development of career competencies has been related to adaptive behaviors (Arthur et al. 1999), and to marketability and career success (e.g., Eby et al. 2003). Kuijpers et al. (2006) also demonstrated that mastering career competencies allows a higher degree of congruence between personal characteristics and values on the one hand, and career success on the other hand. Recent studies have also argued that career competencies may be related to employability and employee wellbeing. Indeed, Akkermans et al. (2013a, c) showed a positive relationship between career competencies and perceived employability, and between career competencies and work engagement. In addition, career competencies and job resources (e.g., social support, opportunities for development) seem to have a mutually enhancing effect (i.e., a gain cycle), which subsequently increases work engagement. Finally, Akkermans et al. (2014) demonstrated an increase in perceived employability and work engagement after young workers had participated in an intervention that increased their career competencies (see also the Cases section below). Taken together, career competencies may be crucial to better prepare for the STWT and to flourish during the start of one's career.

In summarizing the above, we conclude that career adaptability and career competencies are two concepts that may be crucial to support young adults before and during the STWT, especially given the dynamic and flexible nature of the new career. In order to provide that support, we would also need empirically tested, evidence-based interventions. Our next section focuses on two examples of such interventions: the CareerSKILLS intervention and the School to Work Group Method.

5.5 Cases: CareerSKILLS and the School-to-Work Group Method

5.5.1 Characteristics of CareerSKILLS and School to Work Method

As argued in this chapter, improving young people's preparation for employment involves, among other things, strengthening their resources for career adaptation and career competencies which enhance career management and wellbeing (Akkermans et al. 2013c; Koivisto et al. 2011). These resources and competencies include job-seeking and job-orientation skills, integration into organizations, positive attitudes towards life-long learning, and the career competencies mentioned above. To support young individuals who are going through the STWT, two interventions have been developed that specifically focus on these issues: CareerSKILLS and the School to Work (STW) Group Method.

Both CareerSKILLS and the STW Group Method were developed to stimulate employability, career development, and wellbeing of young employees. The interventions are based on the training principles developed at the Michigan Prevention Research Center (MPRC; Price et al. 1998), of which the applicability to and relevance for job-related and career-related interventions has been demonstrated (e.g., Vuori et al. 2011). The group interventions deal with the development of career competencies, with career management strategies related to job-searching and organizational socialization, and with effective ways to take care of one's work-related wellbeing. CareerSKILLS and STW Group Method are short, intensive group courses that apply theories of social learning and that focus on boosting preparedness (i.e., self-efficacy and inoculation against setbacks) during the STWT.

5.5.2 Methodology and Mechanisms of CareerSKILLS and School to Work Method

5.5.2.1 CareerSKILLS

The CareerSKILLS intervention consists of four sessions in 2 weeks, followed by a return day 6 weeks after starting the intervention. Sessions last 4 h, adding up to 20 h of total intervention time. Participants also receive homework assignments to increase transfer to their daily life situation. CareerSKILLS uses methods such as an active learning process, brainstorming in plenary sessions and in subgroup sessions, social modeling, a socially supportive environment, and role playing. Inoculation against setbacks exercises are built around all the core themes by brainstorming about potential obstacles and solutions for these obstacles (Akkermans et al. 2014). The composition of the exercises in the intervention was built around the development of the six career competencies as defined by Akkermans et al. (2013a).

5.5.2.2 STW Group Method

This program builds preparedness, attitudes, resilience, and mental health needed during the STWT. The intervention consists of structured 5 day intensive program (27 h in total), in which counseling techniques and group exercises are described in detail in manuals (Nykänen et al. 2014; web-site: www.ttl.fi/schooltowork). During group activity participants learn solution-focused attitudes and proactive behavioral strategies related to job seeking and the organizational socialization process. Participants are also trained for anticipatory skills that deal with possible setbacks or barriers. Teaching methods include group discussions, brainstorming, social modeling, and role playing. Participants also receive homework assignments related to social networks and employer contacts.

5.5.2.3 Mechanisms

As stated above, both interventions followed the five components for effective group interventions (Price et al. 1998). These guidelines constitute didactic techniques and delivery methods to maximize active learning processes, and to stimulate self-efficacy and resilience against setbacks. First, *career self-management skills* were developed through the incorporation of career competencies and career self-management strategies, for example by defining one's strengths and interests, and by finding means to achieve career goals. This component is important because most young individuals have insufficient knowledge and skills in this area (Vuori et al. 2005). Second, *active teaching and learning methods* were used. Instead of lecturing, trainers activate participants' own knowledge and skills, for instance in discussions and role plays. An advantage of active learning is that it takes place in the career context of the participants, which makes the content very specific and applicable to their real-life situation. Third, *certified trainers* who lead the sessions are well trained to build trust and facilitate group processes. Fourth, trainers attempt to create a *supportive training environment*, in which participants learn from and support each other. This occurs through modeling and rewarding supportive behaviors (Vuori et al. 2011). A supportive environment is crucial for learning and facing challenges (Vuori et al. 2005). This peer-group format seems to fit well with young people who spend a great amount of time socializing with their own age group. Group discussions and exercises are student-centered, and learning in a positive group atmosphere enhances participants' self-efficacy as they adopt new strategies to face their challenges from their peers. As participants gain courage to share their experiences, they gradually learn new skills for problem solving and finally more generally for their career management. Finally, *preparation against setbacks* is used to brainstorm about potential career-related obstacles and how to overcome these obstacles. This component is important in providing a buffer to potential risks because of fail experiences. It is particularly beneficial for high-risk participants to share experiences regarding possible barriers as this allows them to gain social support from the group and find solutions to overcome these barriers.

5.5.3 Effects of CareerSKILLS and School to Work Method

5.5.3.1 CareerSKILLS

Two quasi-randomized field trials among vocational students ($N_{intervention}=112$, $N_{control}=61$) and temporary workers of a multinational ($N_{intervention}=71$, $N_{control}=41$), demonstrated the short-term effectiveness of CareerSKILLS. Participants in both samples, contrary to the control group, showed stable increases after 6 weeks in the mastery of all six career competencies, in work-related self-efficacy and resilience against setbacks, and in the frequency of performing career-related behaviors and their perceived employability (Akkermans et al. 2014). Moreover, there was a

significant increase in the intervention group of work engagement, underlining that the CareerSKILLS intervention is beneficial both in enhancing career self-management and work-related wellbeing of young workers. Finally, evaluations of the intervention by trainers and participants were both highly positive.

5.5.3.2 STW Group Method

A randomized field experiment involving 416 graduates of vocational colleges demonstrated the beneficial effects of the STW program on initial employment, its quality, and mental health at the 10-month follow-up. The results showed that group participants were 1.7 times more likely to be employed and they had a 2.1-fold chance of being employed in a job that corresponded to their education and personal career plans compared to the controls. The intervention also significantly decreased psychological distress and depression among those initially at risk of depression compared to controls. Moreover, after the program goals related to personal work life and finances among group participants were 2.3–2.5 times more frequent than among those in the control group (Koivisto et al. 2007). The analyses on the mediating mechanisms of the intervention demonstrated that the intervention increased employment preparedness, which in turn increased employment after 10 months. Furthermore, employment predicted work-life-related goals and lower financial strain, which in turn was associated with lower depressive symptoms (Koivisto et al. 2010).

5.5.4 *Implementation of CareerSKILLS and School to Work Method*

Transforming research findings and interventions into practice is not an easy task. In organizations, teachers and counselors often face practical barriers that are not present in research settings. Studies may give promising research findings, but the key question is how these new practices reach the target group. In case of the CareerSKILLS and STW method, many efforts have been made to optimize effective implementation in practice.

In The Netherlands, the CareerSKILLS intervention was a new addition to the existing “SKILLS” program. These interventions are derived from the original JOBS program developed at the MPRC. Applied scientific organization TNO provides schools and companies with train-the-trainer sessions in which the participants learn the tricks of the trade regarding these interventions. Because CareerSKILLS is part of an existing nationwide program in The Netherlands, implementation was immediately achieved in several organizations. In 2012, participants from a large Dutch multinational and a Dutch vocational school with multiple locations had been trained to provide the CareerSKILLS method. Both

organizations have integrated the intervention into their standard material for career guidance.

During the year 2004 the Finnish Board of Education organized European Social Fund (ESF) seminars where project managers from different schools and developmental projects exchanged experiences regarding good practices. Positive experiences regarding the STW method spread quickly. Project managers country-wide wanted to participate in the STW train-the-trainer workshop offered by the Finnish Institute of Occupational Health (FIOH). Since 2002, over 500 teachers and school counselors have participated in training workshops organized by the FIOH and over 17.000 copies of student workbooks have been distributed. Several vocational schools have integrated the STW group method into their curriculum and courses, which has strengthened its institutionalization into organizational routines.

5.6 What's Next? Implications and Suggestions for an Adaptive STW Transition

In this chapter we have shown that young individuals face many challenges on today's labor market. Unemployment and underemployment rates are high in many parts of the world, and careers are becoming increasingly complex and dynamic. Whether young individuals have a vocational track, they learn on the job, or they combine learning and working, this implies that the STWT is becoming an ever bigger challenge for young adults around the world. For these reasons, it is more crucial than ever to understand how adolescents and young adults can prepare for, and successfully go through, the STWT. We have discussed antecedents and consequences of an adaptive transition, as well as the emerging topics of career adaptability and career competencies. In this final section we turn our attention to the future and provide suggestions with regard to fostering an adaptive STWT.

5.6.1 Career Orientation and Guidance

Career orientation and guidance programs, either during vocational tracks or on-the-job learning, have received increasing attention during the past few years. However, the existing career guidance programs are very diverse and most of them lack empirical evidence. These programs need to become more intertwined with the regular curricula of vocational schools, and with training programs and HR policies of organizations. To further increase the quality of these programs, researchers and practitioners should join forces in developing evidence-based career-related interventions, for example with career adaptability (Koen et al. 2012), preparedness (Lent 2013), and career competencies (Akkermans et al. 2013a) as building blocks. The CareerSKILLS and STW methods are examples of this. In creating rich career

orientation and –guidance programs during the entire vocational education process, adolescents will be better *prepared* for their eventual transition to working life.

5.6.2 *Smart Jobs*

In the new career, employees have to continually make career-related decisions and adopt a perspective of lifelong learning. To achieve a productive career and to become sustainably employable, it is crucial that young adults experience an adaptive STWT in which they find ways to effectively develop their competencies. One way of achieving this would be through *smart jobs*, that is, jobs that stimulate learning, growth, and employability of young workers (Hall and Las Heras 2010). This would require that employers take more responsibility in supporting young workers' careers. Career competencies could be a fruitful basis for creating these kinds of jobs because career competency development contributes both to employee wellbeing and employability (Akkermans et al. 2013b, c, 2014). This could also help to tailor smart jobs to the specific needs of young workers, for example that these jobs are challenging but also clearly defined (Akkermans et al. 2009). Researchers and practitioners alike could therefore focus on discerning critical factors that determine the learning potential of jobs, which could subsequently be implemented in their job design in order to create high quality employment for young workers. By creating “smarter jobs” it will be more manageable for young adults with lower vocational qualifications to *adapt* during the turbulent STWT and to experience high levels of wellbeing and performance during their early work career.

5.6.3 *Theory Development*

Although a number of theories regarding the STWT have been developed in the past few decades, research on this transition would benefit from more structural use of theories. The most prominent theory related to the STWT is Holland's person-job fit theory, which was developed in 1985. Although the idea of fit is still appealing and relevant in today's dynamic labor markets, the process of making career-related choices has changed drastically during the past few decades. Because the career environment has become more unpredictable, advance planning is not always enough. Young adults need to make important choices on a permanent basis and therefore need preparedness and competencies to become and remain sustainably employable. It is important that we develop new and/or additional theories regarding the STWT for the changing world of careers. In this chapter we have attempted to start the discussion on theory building endeavors by emphasizing, among other things, the need for (1) adaptability, (2) preparedness, and (3) competency development. In building stronger theories about an adaptive STWT we can also enhance

our career-related support for adolescents and young adults around the world by developing practically relevant programs that have a strong theoretical basis.

5.6.4 *Final Conclusion and Integration*

In this chapter we started from a European perspective on young adults who are going through the STWT, and we showed that unemployment and underemployment rates in the EU have been rising dramatically during the past few years. We also underlined that the European context holds some specific characteristics that may not be applicable across other continents, such as the vocational and academic tracks in countries like The Netherlands and Finland. All in all though, we sincerely believe that many of the insights and suggestions provided in this chapter also hold for other countries and educational systems. Notwithstanding the fact that the educational and cultural context clearly have an important impact on the STWT, we posit that antecedents such as positive family influences, relevant educational and work experiences, and high core self-evaluations (e.g., self-efficacy) are crucial predictors of an adaptive STWT for young adults regardless of their specific context. In addition, realizing a high level of congruence between personal characteristics and job characteristics (i.e., P-J fit) is crucial for every young adult, as well as receiving sufficient motivating resources at work during their early career. These careers are drastically changing, as is evident by scientific studies across the world on such issues as the boundaryless and the protean career (Akkermans et al. 2013a). So, although educational systems differs around the world, we believe that young adults across countries and educational and labor systems who are more adaptable, better prepared, and more competent with regard to their work and career, will have a better chance of experiencing an adaptive STWT. In this way, we hope this chapter provides useful knowledge and practical implications for all those around the world who want to support young adults to make an adaptive transition to their working lives.

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Chapter 6

Socialization into Organizations and Balancing Work and Family

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6.1 Introduction

Young adults who start their vocational training or enter their first job have to adapt to a new life situation that has long-term implications for their future career development. Nowadays, however, life time careers are characterized by a number of transitions that do not only involve starting vocational training and entering a first job, but also, for instance, changing the job for career advancement reasons, leaving the workforce due to family obligations, reentering the workforce after sickness or parental leaves etc. Such changes typically represent critical life events that go along with substantial stress experiences. These stress experiences are often not restricted to the work domain itself but have also an impact on other life domains. As it is known that high strain levels predict an increased probability of sick leaves (Duijts et al. 2007) and an increased long-term risk of job-related burnout (see Shirom 2011), occupational transitions represent an important though neglected starting point for preventing maladaptive trajectories and for fostering sustainable working lives. Given the stress relevance of transitions, from the viewpoint of occupational health, periods of organizational socialization build a possible starting point for preventing stress-related health problems and burnout.

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The present chapter outlines and puts into context the tasks, individual challenges, and outcomes of organizational socialization. In the first part of the chapter, we categorize different forms of career-related mobility that form the background for future processes of organizational socialization and outline the importance of employees' own activities during this adaptation process. In the second part of the chapter, we embed organizational socialization and individual self-regulatory strategies in the broader life context of the individual. We summarize findings from a longitudinal research project that focuses on the experiences of mothers who return to work after maternity leave. This specific transition serves as a sample case for demonstrating how both work-related and family-related experiences and characteristics impact occupational adjustment processes. At the same time, it is an example of how particularly young women are confronted with the challenges of career interruptions and organizational (re)socialization processes.

6.2 Conceptualizing Career-Related Transitions

Career-related transitions are widespread and multifaceted. In fact, there are many forms of career transitions, for instance, movements between employers (organizational mobility), contracts (e.g., part-time/full-time; temporary/permanent), and situations with and without employment (employment mobility; for an overview see Andersen et al. 2008; Feldman and Ng 2007) as well as a change of occupational status in terms of job profile or content (occupational mobility). Moreover, the aforementioned forms of career mobility may or may not include geographical mobility (in the sense of beginning work in a different town or country). It is also important to differentiate between voluntary and involuntary turnover, because voluntary turnover typically has more beneficial effects on the employee both in terms of economic and well-being consequences (Andersen et al. 2008). Regarding occupational mobility, it is important to distinguish between upward and downward mobility. Feldman and Ng (2007) suggested to differentiate the motivational reasons for mobility, i.e., whether it stems from the desire to get away from an adverse situation or whether it is triggered by a positive attitude towards a specific new job opportunity. The likelihood and frequency of career mobility have been studied in a number of surveys. EU data show that socio-demographic characteristics such as age, gender, and education are important predictors of career mobility: Organizational mobility is negatively related to age and highest in 25–34 year olds (Andersen et al. 2008; for evidence of negative correlations between age and organizational turnover in U.S. and Indian samples, see Ramesh and Gelfand 2010). In other words, the tasks of adapting to a completely new organizational environment are particularly important in young adulthood. In contrast, there is a positive age correlation for upward occupational mobility. There is some evidence that women have higher organizational mobility rates than men, whereas men have a higher likelihood of upward occupational mobility (Andersen et al. 2008). Voluntary change of the employer is more common among the highly-educated. This may be explained by

the higher applicability of their human capital (Andersen et al. 2008; Feldman and Ng 2007). Moreover, employees with permanent contracts show a higher upward mobility than individuals with temporary contracts.

Organizational socialization takes place in all the aforementioned forms of career mobility. However, the kind and complexity of change might have an impact on both the perceived difficulty and duration of the respective adjustment processes. In addition, conceptualizing organizational socialization from a lifespan perspective brings to the fore the embedding in the individuals' broader life context and, more specifically, questions of the work-family interplay. Before we address this interplay in more detail, we introduce the specific tasks and relevant outcome criteria of organizational socialization.

6.2.1 Successful Organizational Socialization: Organizational and Health-Related Outcomes

Organizational socialization is defined as the process by which new employees become fully familiar with the values and behaviors that are necessary for task performance and by which they become fully socially integrated at the workplace (see Bauer et al. 1998, 2007). In short, organizational socialization “*is a process through which new employees move from being organizational outsiders to becoming organizational insiders*” (Bauer and Erdogan 2011, p. 51).

When conceptualizing organizational socialization success, it is crucial to differentiate between different outcome levels (see Fig. 6.1). One common differentiation is between proximal and distal outcomes. Proximal indicators of successful adaptation typically include role clarity, task mastery, understanding of organizational structures and rules as well as social integration (see Chan and Schmitt 2000). More distal outcomes are, for instance, job satisfaction and organizational commitment (e.g., Bauer et al. 2007; Bauer and Erdogan 2011; Saks and Ashforth 1997) with the latter denoting a positive attitude towards and strong identification with the organization as well as the intention to remain an organizational member. As indicators of an unsuccessful socialization process again short-term and long-term outcome criteria can be distinguished. Role ambiguity as well as doubts regarding the job-related decision one has just made might be examples of negative short-term outcomes. With respect to long-term negative consequences, burnout is a serious risk, thereby showing that health outcomes have to be considered when evaluating organizational socialization processes. Most importantly, proximal outcomes build a basis for the more distal outcomes. As shown by Thomas and Lankau (2009), for instance, role stress (i.e., a proximal outcome) was positively associated with burnout symptoms (i.e., a distal outcome).

Clearly, successful adjustment of new employees is important for both individuals and organizations. Unsuccessful socialization is detrimental to organizations not only because of immediate productivity losses due to, for instance, lowered performance or sick leaves, but also because the costly process of employee recruitment

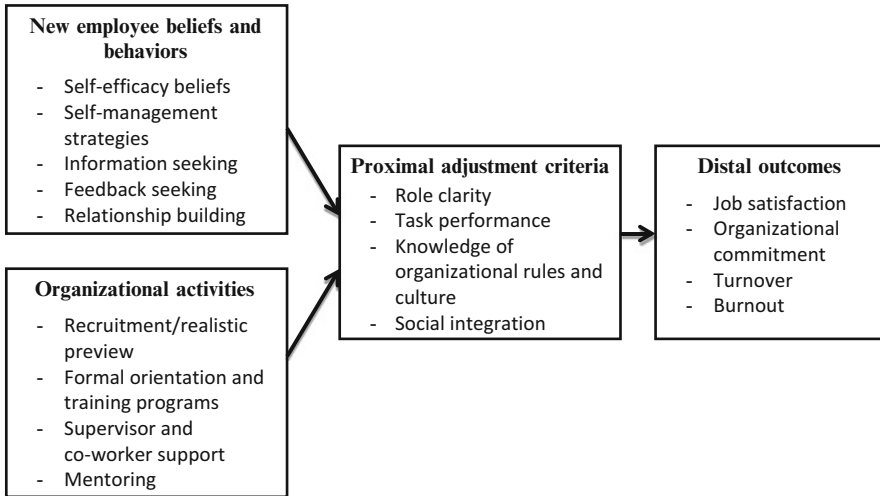


Fig. 6.1 Process model of organizational socialization (See also Bauer and Erdogan 2011; Saks and Ashforth 1997)

and training must be repeated if new employees leave the organization (Griffeth and Hom 2001; see Bauer and Erdogan 2011). In addition, early turnover rates might also have negative effects on an organization’s image as an employer. Ideally, both the organization and new employees play an active role in the socialization process (see Fig. 6.1). In the following we concentrate on the employees’ activities that foster successful organizational socialization.

6.2.2 *Newcomers as Active Agents in the Socialization Process*

Newcomers’ proactive behaviors include both general self-management strategies and socialization-specific ones. The latter comprise information seeking, feedback seeking, and relationship building (i.e., networking; see Bauer and Erdogan 2011). These activities are meant to increase role clarity, task mastery, and the acquisition of organizational knowledge in a broad range of organizational entry situations (e.g., starting a first job, voluntary job-change, re-entering the workforce after a phase of unemployment or after sickness or parental leaves). In the following, we describe the socialization-specific strategies in more detail.

Information seeking is a key behavior to foster adjustment. Two primary methods of information seeking are observation and inquiry (Ashford and Cummings 1983). Newcomers can acquire information by observing their environments, reading provided written information material (i.e., company website, employee handbook), or asking coworkers and supervisors.

Concerning information seeking, some authors differentiate between technical and referent information seeking. Technical information seeking refers to information about how to perform one's job (including how to use tools and equipment), whereas referent information denotes information about the expectations that others have (Chan and Schmitt 2000; Morrison 1993). In addition, one can also distinguish between information sources, e.g., supervisor and co-workers. Based on a four-wave longitudinal data set with students entering a doctoral program, Chan and Schmitt (2000) could not identify any growth or decline in referent information seeking from co-workers; however, referent seeking frequency from the supervisor slightly increased. In addition, there is evidence that the frequency of technical information seeking decreases over time, whereas referent information seeking tends to increase over time (e.g., Chan and Schmitt 2000; Morrison 1993). It has been argued that technical information decreases as task mastery increases (Bauer and Erdogan 2011; Morrison 1993). However, Chan and Schmitt (2000) have shown that individual differences in change rates of information seeking are not clearly attributable to changes in task mastery. They discuss that information seeking has social costs (e.g., creating doubts about one's competencies) that might be differently high for different groups of individuals and might also increase with time (see also Jaeckel et al. 2012).

Active *feedback seeking* is a specific form of information seeking that refers to an employee's acquisition of information regarding his or her performance (Wanberg and Kammeyer-Mueller 2000). New employees may make mistakes, misinterpret their environment, or unintentionally violate unwritten organizational rules. By actively seeking feedback, newcomers learn how to best meet an organization's expectations or standards. Both information and feedback seeking have been found to be beneficial to newcomers' adjustment (Bauer et al. 2007; Wanberg and Kammeyer-Mueller 2000).

Another proactive strategy is *relationship-building*, which refers to behaviors of the new employee that aim at initiating social interactions at work. Relationship building activities include, for instance, participation in official social activities, seeking time to talk informally (e.g., coffee breaks), and volunteering for company functions. Active networking with colleagues serves to obtain access to task assistance, emotional support, and information about norms and expectations (Seibert et al. 2001). Frequent interactions with colleagues as well as positive social relationships at the workplace are positively linked to the intention to stay with the organization and negatively related to turnover (Higgins 2001; Nelson and Quick 1991). Relationship building is also an important predictor of performance and satisfaction (e.g., Ashford and Black 1996; Wanberg and Kammeyer-Mueller 2000). The important role of supervisors' support and a perceived positive relationship with the supervisor for a number of socialization outcomes (e.g., job satisfaction, burnout) has been repeatedly shown (e.g., Jokisaari and Nurmi 2009; Raabe and Beehr 2003; Thomas and Lankau 2009). In the same vein, high quality relationships with co-workers are relevant for outcome criteria such as job satisfaction (e.g., Raabe and Beehr 2003) and a lowered risk for burnout (e.g., Taormina and Law 2000).

With regard to the learning dimension of adjustment, other coworkers or supervisors may provide important information regarding role expectations or task accomplishment as well as knowledge about the organization in general. This also indicates how highly intertwined the proactive strategy of information seeking (see above) and social relationships at work are. Following Fang et al. (2011), to achieve socialization in the organization, newcomers must build on social resources, such as information, that are embedded in their relationships with experienced coworkers. Moreover, new employees' relationships with coworkers can be expected to be of crucial importance for their social integration in and identification with the organization or workgroup. Interestingly, it is still unexplored how the growing use of virtual work and the accompanying reduction of face-to-face interactions with colleagues and supervisors affect the pace and results of organizational socialization (see Feldman and Ng 2007). In addition, there is a lack of research on the question how employees' family contexts affect organizational socialization processes.

6.3 The Work-Family Interplay in Career Mobility and During Organizational Entry

The work-family interplay can be conceptualized from the perspective of ecological systems theory (Bronfenbrenner 1989). Building on Bronfenbrenner's seminal work, Voydanoff (2007) described work and family as microsystems that are characterized by distinct structures, functions, and roles but that, at the same time, represent an important mesosystem (i.e., interrelated microsystems). Functioning within and across the work and family domains might be influenced by exosystems, i.e., mesosystems that include microsystems in which individuals do not participate themselves, such as their spouses' work setting. If, for instance, in a couple with young children, the husband's work setting does not allow for flexible working hours, this might influence the wife's decision regarding employment mobility in terms of changing from full-time to part-time employment. Microsystems, mesosystems, and exosystems are nested in the cultural macrosystem, which is characterized by specific opportunity structures and constraints (e.g., low or high unemployment rates). This macrosystem also includes gender-specific characteristics such as gender-specific beliefs and norms about, for instance, the breadwinner role. To better understand the work-family interplay, this mesosystem should be investigated from a temporal process perspective (Voydanoff 2007). Such a perspective entails a focus on tracking the effects of changes in different life domains such as those caused by the transition to parenthood, job entry, etc.

When applying the ideas of ecological system theory to career mobility and related organizational socialization processes, one important macrosystemic characteristic to be noted is that, across different countries, more women than men have interrupted career patterns due to family-induced leaves, i.e., women's higher organizational mobility rates seem to be due mainly to maternity-related

re-transitions to working life (Andersen et al. 2008). It is also important to note that national differences exist in the way parents are supported after childbirth by legal regulations (see below).

As mentioned above, in career mobility research, it is considered important to differentiate between voluntary and involuntary organizational, occupational, and employment mobility. At a superficial level, this might be easily done on the basis of the kind of transition it entails (e.g., an involuntary transition to unemployment). At a deeper level, however, it becomes clear that the individual's perspective must be taken into account when classifying a career decision or change as voluntary or involuntary. This particularly holds true with respect to making career decisions when facing family demands. If a young mother, for instance, decides to stay home for several years after childbirth, this might be completely voluntary and reflective of her personal preference or, for example, the result of lacking affordable childcare facilities (i.e., an unsupportive macrostructure). In the same vein, she might re-enter the workforce by accepting a position in an organization that offers her optimal fit with respect to her capabilities and qualifications or accept a job only because of the economic necessity of contributing to the household income.

From mesosystemic and exosystemic perspectives, it is also important to note that, as suggested by Andersen et al. (2008), job mobility may have negative side effects on the family because job change (i) demands extra time that the mover cannot spend with his or her family and (ii) typically restricts the potential job-related mobility of the partner. With respect to the latter, it has been shown that the spouse with primary wage earnings has a relatively greater influence on mobility decisions (e.g., Van Ommeren et al. 2002). In addition, Eby (2001) found the upward mobility of one spouse to be often accompanied by downward mobility of the other spouse. High perceived mobility demands or actual mobility of both partners might even prevent couples from starting a family. With respect to the presence of children, additional job-mobility effects have been found: In a qualitative study, Doering and Rhodes (1989) showed that individuals are more likely to make job changes if they do not have to support a family. However, at the same time, the likelihood of turnover increases if an employee experiences high work-to-family conflicts (mediated by the strain-inducing effect of work-to-family conflicts; e.g., Grandey and Cropanzano 1999). Not surprisingly, therefore, a family-supportive climate is associated with increased organizational commitment and decreased turnover intentions (e.g., O'Neill et al. 2009). In addition, there is growing longitudinal evidence that work-family conflicts have detrimental effects on employees' mental and physical health (e.g., Frone et al. 1997; Innstrand et al. 2008).

In a study that was recently conducted in the U.S. and India, Ramesh and Gelfand (2010) introduced the concept of "family embeddedness" and found it to be negatively related to actual turnover rates in both countries. Similarly, Wasti (2003) demonstrated that family opinions concerning the employing company is a predictor of turnover intentions. Ramesh and Gelfand (2010) built their concept of family embeddedness on Mitchell et al.'s (2001) job embeddedness model, which "*suggests that there are numerous strands that connect an employee and his or her family*

in a social, psychological, and financial web that includes work and non-work friends, groups, the community, and the physical environment in which he or she lives” (p. 1104). This view of job embeddedness entails work-related (e.g., positive relationships with co-workers) and non-work related (e.g., friendships with persons living in the same community) components. A number of studies that included scales on facets of person-to-job, person-to-organization, and person-to-community attachment showed that job embeddedness added to the prediction of voluntary turnover above and beyond predictors such as job satisfaction and perceived job alternatives (e.g., Crossley et al. 2007; Lee et al. 2004). In their study, Ramesh and Gelfand (2010) explicitly added a measure of family embeddedness that comprised statements on a positive connection between family members and the organization, a positive view of family members of the employee-organization fit, and the perception that a possible employee turnover would have costs for the family members. They showed that family embeddedness increased the likelihood of remaining an organizational member.

6.3.1 Women’s Reentry to Working Life After Maternity Leave

Without doubt, when investigating how family life interplays with working life, the transition to parenthood represents a crucial developmental phase of young adulthood that does not only have familial meaning but also career-related significance. The fact that many female careers are characterized by family-induced interruptions is mainly due to the transition to motherhood. After birth, most young mothers take time off from work but return to work after a while. The transition back to work after maternity leave represents a developmentally important point in a woman’s life course, in which, per definition, both the work and the family domains are involved and must be balanced. When women return to work after childbirth, they must re-adjust to working life and, at the same time, handle the new family situation. In other words, re-entry to work after maternity leave is accompanied by strong work-related and family-related demands. The return to work entails either an entry to a new organization or a return to the former employer. For those women who enter a new organization, the tasks of organizational socialization can be derived from the literature on organizational entry research (see above). However, particularly after longer leaves, women must not only adapt to organization-specific tasks but might also have to catch up with recent developments in their professional fields. Returning to the former company goes along with a more familiar situation at work; however, even in this case intra-organizational changes might have taken place (e.g., former colleagues might have retired, a new supervisor might be present). In addition, after childbirth a mother might decide to work fewer hours, which might be associated with a different role within a work team. In sum, processes in this life situation can be assumed to be multi-faceted and complex. So far, however, they have received surprisingly little scientific attention.

6.3.1.1 Results from a Longitudinal Re-entry Project

In the following, we mainly refer to a longitudinal project that was conducted in Switzerland (German-speaking cantons), Germany, and Austria (for more details see Jaeckel et al. 2012; Seiger and Wiese 2011; Wiese and Heidemeier 2012; Wiese and Ritter 2012). The project aims to analyze the trajectories of adjustment over time and identify possible predictors both on the individual, psychological level and in the work and family contexts.

The overall project design comprised four measurement points: T0 took place 2 weeks before re-entry ($n_0=301$), whereas the subsequent measurement points took place approximately 5 weeks (T1; $n_1=267$), 11 weeks (T2; $n_2=238$), and 6–8 months (T3; $n_3=208$) after the return to work. In addition, a subsample of 149 women took part in a 14-day diary study beginning 2 weeks after re-entry. All women had been in the workforce before maternity leave and were working at T1, T2 and T3. After their return to work, they mostly held part-time positions (94 %). In Switzerland, Germany, and Austria it is very common for working mothers to work part-time (Romans 2008). With respect to leave length, it should be noted that in the present project, maternity leave is defined as any time a mother takes off from paid work after childbirth. Legal regulations concerning parental leave in the three countries are quite different. In Austria and Germany, protected parental leave options exist for both mothers and fathers, who are allowed to take a leave of up to 3 years. In Switzerland, where most study participants reside, only mothers have a statutory leave option, with a maximum length of 16 weeks. However, even in Switzerland mothers may decide to stay away from the workforce for a longer time period. In the present sample, leave length ranged from a few weeks to 18 years. However, more than 80 % of the women had returned to work within the first 3 years after childbirth.

Work Adjustment After Re-entry: Self-Regulatory Strategies and Contextual Demands/Resources

In their analyses of work adjustment after job re-entry, Wiese and Heidemeier (2012) suggest an integrative view on individual strategies and the work-family context that builds on stress-related resource approaches (Hobfoll 1989), the job-demands-resources model (Bakker and Demerouti 2007), and action-oriented life-span views of developmental regulation (Baltes 1997). They tested direct effects of women's self-regulation and demanding and supportive contextual characteristics as well as, most importantly, moderating effects. More precisely, the use of self-regulatory strategies is assumed to be particularly beneficial for work adjustment when mothers face high contextual demands and have few contextual resources.

Wiese and Heidemeier (2012) differentiate between two important key components of successful intentional self-regulation, i.e., beliefs and strategies. In the context of work, it has been repeatedly shown that self-efficacy beliefs are positively associated with important outcomes such as job satisfaction and job performance (see Judge and Bono 2001). To conceptualize self-regulatory strategies, Wiese and Heidemeier

(2012) referred to the meta-model of *selection, optimization, and compensation* (SOC) formulated by Baltes (1997). This model suggests *selection, optimization, and compensation* as a functional set of components of successful development and has been shown to be applicable in different life domains and different phases of the life span (e.g., Abele and Wiese 2008; Freund and Baltes 1998; Schmitt et al. 2012; Wiese et al. 2002; Young et al. 2007). *Selection* refers to setting personal goals and priorities. *Optimization* describes means of goal pursuit, whereas *compensation* is defined as the application of means to counteract impeding or actual losses. With respect to contextual influences, demands such as work stress and the number of children a mother has to care for were included. Supervisor support and working hours were included as indicators of contextual resources. With respect to working hours, it is argued that women who spend only very few hours at work might have few opportunities to seek information, network with co-workers, etc.

Five important findings that resulted from the analyses conducted by Wiese and Heidemeier (2012) based on data from the three measurement points after re-entry (T1, T2 and T3; see above) will be highlighted in the following. They refer to (1) general work-adjustment increase, (2) self-regulation, (3) contextual demands, (4) contextual resources, and (5) the interplay between self-regulation and contextual demands/resources.

First, as expected, *work adjustment increased* over time. Second, both *self-regulatory resources*, i.e., self-efficacy beliefs and SOC strategy use, predicted successful work adjustment. Third, according to expectations on the role of *contextual demands*, work-related stress predicted poorer adjustment to work. Work related-stress appears to prevent women from investing in organizational socialization tasks. Work adjustment was lower for women with a greater number of children. Fourth, confirming the authors' assumption on *contextual resource effects*, a greater number of weekly working hours positively predicted work adjustment. At least in a sample of primarily part-time employees, the number of hours actually spent at work is a resource that helps in the organizational socialization process. Because one could argue that, beyond a certain number of hours, an additional increase in working time might not help in the adjustment process, Wiese and Heidemeier (2012) also tested a non-linear model. This model, however, did not lead to better fit. Two cross-sectional studies conducted in Israel and the U.S., did find working hours and work adjustment to be negatively related (Feldman et al. 2001, 2004). However, the samples comprised many more full-time employees; and the adjustment measure used included items on work-family conflicts, which are known to be positively associated with working hours (Buehler and O'Brien 2011). Wiese and Heidemeier's (2012) measure of work adjustment, in contrast, solely comprised statements referring to the core aspects of organizational socialization, i.e., to knowing one's tasks and the organizational culture as well as to becoming socially integrated (Bauer et al. 2007; Fang et al. 2011). Here, working hours are a resource to more easily re-adapt to workplace tasks and demands. Surprisingly, supervisor support, which has been reported to be an important contextual resource for organizational newcomers in other studies (e.g., Anakwe and Greenhaus 1999; Jokisaari and Nurmi 2009), did not predict work adjustment during the process of mothers' job re-entry. The present analyses showed that, overall, the mean levels of

supervisor support were low and even decreased over time. This may indicate relatively rare direct interactions between supervisors and returning mothers. Therefore, support from coworkers might be more relevant. However, although post-hoc analyses with this source of support revealed that it did not add to the prediction of work adjustment, this does not imply that social support is irrelevant in the context of mothers' return to paid work. Most importantly, Jaeckel et al. (2012), who also used data from the present project, demonstrated that social support at the workplace plays an important role in employees' occupational self-efficacy beliefs. The crucial aspect of support that accounted for differences in self-efficacy beliefs was reciprocity: Women who received a high amount and provided a low amount of social support reported the lowest self-efficacy beliefs. In contrast, women who received low amounts yet provided high amounts of support reported the highest self-efficacy beliefs. The reciprocity effect, however, only emerged after a while. During the first weeks after re-entry, it might be perceived as a normative process to receive help from coworkers without necessarily providing much support. However, after some months, not being able to adhere to the evolving norm of support reciprocity might have adverse effects on an employee's self-efficacy beliefs. Figure 6.2 illustrates the negative over-benefiting effect on self-efficacy beliefs based on data from the last measurement point. Moreover, another potentially important source of support during re-entry is the partner. Partner support is not a predictor of work adjustment but does predict women's affective well-being (Seiger and Wiese 2011). Fifth, there were significant *interaction effects of SOC-strategy use with contextual demands and resources* that support the assumption that self-regulation is especially important for individuals who face high demands and/or have only few resources. As shown in Fig. 6.3, job stress was less detrimental to work adjustment when

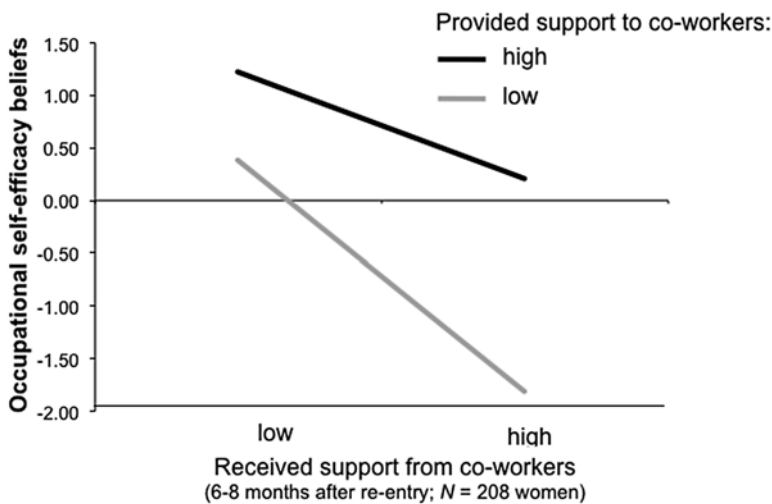


Fig. 6.2 Occupational self-efficacy beliefs in association with received and provided support (Adapted from Jaeckel et al. 2012, p. 397)

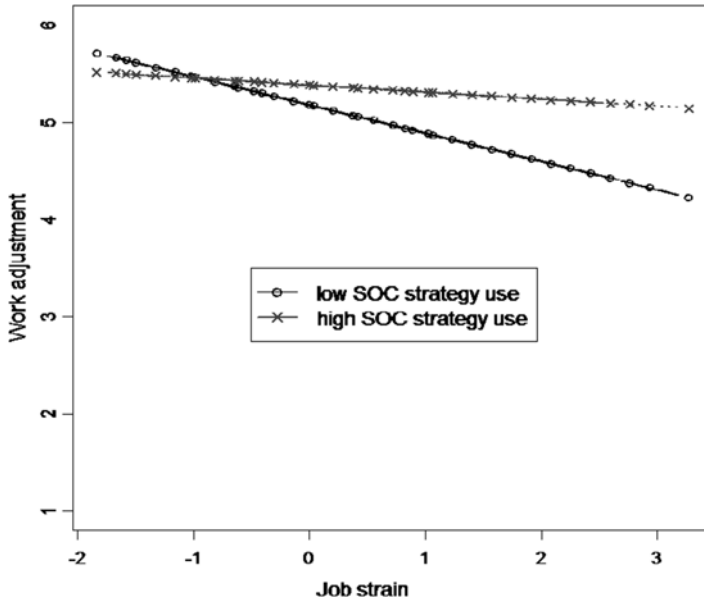


Fig. 6.3 Interaction between job stress and intentional self-regulation (From: Wiese and Heidemeier 2012, p. 329)

women reported higher use of SOC. SOC strategy use also mitigated the negative relationship between number of children and work adjustment. Finally, having fewer resources available, such as the amount of time women can spend at work, was less detrimental to work adjustment for women who reported higher SOC strategy use.

Re-entry Regrets as an Alternative Criterion of Successful Work Re-entry

Using standardized diary data collected at the beginning of organizational (re)-entry, Wiese and Ritter (2012) referred to an alternative adjustment indicator, i.e., return-to-work regrets. They found daily return regrets to predict lowered organizational commitment as well as the intention to quit and a preference for fewer working hours. Hence, return-to-work regrets represent a proximate adaptation criterion that is relevant for outcomes seen as more distal success criteria of organizational socialization (e.g., organizational commitment, see above).

Concerning the prediction of daily regrets, Wiese and Ritter (2012) showed that both day-specific and person-specific factors should be taken into account. As expected, daily family-related stress experiences predicted working mother's return regrets. In addition, emotional instability as a trait component and not being sufficiently prepared for the return as well as a situation in which financial requirements were an important reason for the return increased daily regrets. Moreover, early returners reported more daily return regrets, whereas late returners not only

reported fewer regrets but were also more resilient when experiencing family stress: While early and late returners did not differ in terms of the mean levels of family stress, family stress experiences only resulted in regrets among early returners. Hence, leave length appeared to be a resilient factor when focusing on return-to-work regrets. This is important to note because in I&O-research, leave length has mainly been conceptualized as a risk factor; and it has been demonstrated that longer leaves result in long-term wage penalties (e.g., Gangl and Ziefle 2009). The risks of short leaves have so far been mainly discussed from a health perspective (e.g., Gjerdingen et al. 1993). Clearly, a more comprehensive view on adaptive leave length decisions requires an integrative evaluation of different outcome criteria. Psychologically, the crucial task is to determine when a mother has optimal resources for successful return. Here, multiple factors must be taken into account such as the health status of mother and child, financial constraints, opportunity structures in one's occupational field etc.

6.4 Research Conclusions

Organizational socialization research has identified important proximal (e.g., task mastery, knowing organizational rules, social integration) and more distal (e.g., organizational commitment, low turnover intentions/rates) work adjustment criteria, which can be assumed to be relevant in different situations of organizational entry. These different situations range from a first entry into working life to different forms of job change such as movements from one employer to another, contract-related changes (e.g., from full-time to part-time), content-related changes, and situations of organizational re-entry (e.g., after sickness or parental leave). Many job change situations affect not only an employee's working life but also his or her family life; e.g., entering a new position with a great number of working hours reduces the time an employee can spend with his or her children, accepting a job abroad might require decisions about the partner's future work involvement, etc.

The work-family linkages of job-related changes are particularly visible in women's lives because they typically adopt prime responsibility for childcare duties. For instance, most mothers take leave from work after childbirth, whereas, in most countries, extended paternity leaves are an exception. Given the high percentage of women who return to work after a period of full concentration on family life, the re-transition to work after parental leave has evolved into an important developmental task for many women. This return-to-work creates a situation in which work-related and family-related experiences are per definition substantially interrelated. Here, "classical" organization-focused work adjustment measures address only one part of the relevant aspects of adjustment. Other success criteria might involve the women's evaluation of their overall life situation and general well-being. During the return-to-work transition after maternity leave, re-entry regrets may serve as immediate indicators of such evaluations and are related to more distal outcome criteria such as organizational commitment. As demonstrated with respect to mothers' re-entry

into working life, mother's use of self-regulatory strategies can mitigate the adverse effects of high contextual constraints and low contextual resources. For a better understanding of the unique and interactive role of individual and contextual characteristics for the prediction of successful organizational entry and re-entry, longitudinal research designs are most appropriate and highly warranted.

6.5 Practical Implications

How can organizations and career counselors support both the organizational socialization process and the coordination of work and family among new or returning employees in order to foster sustainable and healthy careers? This is not a completely new question; a number of organizational programs and activities have been suggested and implemented in the past. Some of them will be summarized below. In addition, we will outline how findings on the work-family interplay might be integrated into organizational socialization programs.

As summarized by Bauer and Erdogan (2011), some important activities may already begin prior to organizational entry: During recruitment events (e.g., recruitment fairs) and job talks, for instance, realistic job descriptions and previews may help to prevent future employees from experiencing the frustration that results from unmet expectations. In fact, there is evidence that new employees who received accurate and realistic information before job entry, tend to adjust better (Kammeyer-Mueller and Wanberg 2003). Realistic job previews are particularly important for but also difficult to give to very young job seekers because they are not only unfamiliar with the tasks of a specific position but also with working life in general. Next, there are different ways in which organizations can orient and train new employees upon their entry (Bauer and Erdogan 2011): Organizations may offer, for instance, formal orientation seminars or mentoring programs. Klein and Weaver (2000) evaluated a formal orientation training that turned out to increase organizational knowledge and organizational commitment. Mentoring programs have been shown to be particularly beneficial with respect to newcomers' job satisfaction and organizational commitment (see the meta-analysis by Underhill 2006). In addition, also trainings that aim at employees' specific job skills can be considered as helpful socialization tools. These trainings can help employees to feel more self-efficacious and less overwhelmed by the new work tasks and demands. This, in turn, decreases the risk of occupational health impairment. In fact, employees who were satisfied with their organizational job-skill trainings reported fewer burnout symptoms (Taormina and Law 2000).

With respect to individual resources that are helpful during job (re)entry, self-efficacy beliefs play an important role (Wiese and Heidemeier 2012). Therefore, interventions that increase these beliefs can be expected to be beneficial. Here, employees might be encouraged to remember past success in coping with prior career transitions or other difficult work situations. With respect to very young employees who cannot refer to previous work experiences, an alternative way of

boosting self-efficacy beliefs is to ask them to remember learning achievement in school/university or success in leisure-time activities (e.g., sports). The aforementioned finding that a lack of social support reciprocity is a risk factor for newcomers' self-efficacy beliefs (Jaeckel et al. 2012), implies that new employees should be supported but also encouraged to demonstrate their competencies by also giving help to others at the workplace. Since not only self-efficacy beliefs but also actual self-regulatory behaviors promote work adaptation (Wiese and Heidemeier 2012) one might also consider self-management trainings. Another training focus is, of course, stress-management. Please note, however, that training offers might also bear problems: In the very beginning of job entry or re-entry, employees might not have the time to participate in several kinds of trainings. Particularly employees at high risk for health impairments (e.g., those with very high workload) may not take advantage of training programs if the participation is left to their own decision or initiative.

Regarding social resources, a number of studies show that supervisors play a significant role for adaptive socialization processes and employees' health (e.g., Jokisaari and Nurmi 2009; Raabe and Beehr 2003; Thomas and Lankau 2009). Therefore, it is crucial to make sure that supervisors spend enough time with new employees, encourage them to make use of supportive training options, and serve as a model for adaptively dealing with everyday work stress.

We consider it promising to additionally take into account ways of supporting new employees with respect to balancing work and family demands. Clearly, to increase the likelihood of enduring organizational commitment, a well-functioning organizational system of family supportive activities is helpful. These activities may comprise, for instance, dual career job offers to prevent that the career success of one partner impedes the career development of the other. With respect to work-time arrangements, the pros and cons of part-time employment as well as of flextime have to be considered and should be a topic of career counseling. On the one hand, as has been shown in our study on work re-entry after maternity leave, very few working hours slow work adaptation processes (Wiese and Heidemeier 2012). On the other hand, a high number of working hours is positively related to work-family conflicts (Buehler and O'Bryan 2011). The optimal number of working hours is, of course, dependent on the specific resources and demands of an employee. This holds also true for the question of leave length. Supervisors are also important contributors to a supportive work-family climate. This responsibility should receive more attention in leadership trainings. Taking into account that family embeddedness reduces turnover intentions (Ramesh and Gelfand 2010) organizational initiatives in the work-family domain that go beyond the employee himself/herself might be another route to follow. Here, socialization tools that increase family interaction with the organization might be very helpful (e.g., "bring-your-child-to-work"-initiatives, organizational newsletter for the family, etc. see Ramesh and Gelfand 2010).

For young adults starting a career implies entering working life and adapting to its affordances, thereby putting organizational socialization to the fore and at the core of their work experiences. Since organizational socialization represents the starting point for sustainable working lives, optimizing organizational socialization

processes will help to foster employees' health and performance. This benefit of optimizing organizational socialization is, of course, not restricted to young adults but is also applicable to adaptation processes of more experienced employees. As we have shown, embedding organizational socialization into employees' broader life context represents a promising approach to better understand and promote healthy and sustainable career development.

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Part III
Job Insecurity

Chapter 7

Job Insecurity, Health and Well-Being

Hans De Witte, Tinne Vander Elst, and Nele De Cuyper

7.1 Introduction

Our economy is rapidly evolving and transforming. Large scale structural changes seem to occur at ever increasing speed. The automation movement of the 1980s was followed by a vast wave of mergers and restructurings of organisations, alongside phenomena such as downsizing and the privatisation of state-owned companies. These changes often resulted in massive job losses coupled with an increase in temporary work contracts, and hence, many employees fear that their jobs are ‘on the line’. The recent economic crisis resulted in additional downsizings and dismissals and suggests that economic turbulence might very well remain part of the foreseeable future. For some authors, the absence of job security has even become characteristic of the present economic order: for them, the hour of glory of the permanent job has passed (Bridges 1994).

Scientific interest in the phenomenon of job insecurity was triggered about 30 years ago, when Greenhalgh and Rosenblatt (1984) published their authoritative article, ‘*Job insecurity: Toward Conceptual Clarity*’. It was the start of an extensive research tradition which has flourished particularly after 2000. In their introduction to a special issue on ‘job insecurity’ in 1999, Klandermans and van Vuuren still expressed their surprise over the lack of research on the subject. Consultation of the *Web of Knowledge* reveals that, in the meantime, their call has been granted. In the past 20 years, about 300 articles with ‘job insecurity’ in the title and about 1,000 contributions with job insecurity as the main theme have been published. This prob-

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ably reflects the fact that job insecurity is now widely recognized as one of the key psychosocial risks at the workplace, next to aspects such as workload, (lack of) control, role stressors and poor interpersonal relationships at work, leading to psychological and physical harm (see e.g. Leka and Jain 2010).

The abundance of studies on job insecurity notwithstanding, the current chapter focusses on the relationship of job insecurity with employees' health and well-being. More specifically, the following main outlines are made: First, we highlight the definition and prevalence of perceived job insecurity. Second, we give an overview of the negative consequences of job insecurity for individual health and well-being, with specific attention to longitudinal evidence and theoretical explanations. Third, we present variables that may buffer the job insecurity – outcomes relationship. This chapter concludes with some practical suggestions: what can be done to deal with the consequences of job insecurity?

7.2 What Is 'Job Insecurity'?

'Job insecurity' is characterized by the perception of being threatened by job loss (Mohr 2000), and may be defined as *an overall concern about the continued existence of the job in the future* (van Vuuren 1990). Scholars seem to agree on the following characteristics of job insecurity. First, job insecurity is a *subjective* experience, resulting from a person's perception and interpretation of the actual work environment. Accordingly, the same objective situation may result in different interpretations of uncertainty for different employees (Klandermans and van Vuuren 1999; Sverke et al. 2002). Some employees may fear dismissal, while there is no 'objective' reason for them to lose their job. Others may feel quite confident about keeping their job, while there is a real possibility that they will be dismissed. In general, however, the subjective evaluation of one's own chances of being dismissed correlates well with the objective possibility of job loss: perceived job insecurity is a subjective reflection of the objective labour market position (and opportunities) of a specific worker (e.g., De Witte 2005). Next, job insecurity implies *uncertainty* about the *future*: one does not know whether one will retain or lose the current job. This is in contrast with a dismissed employee who knows for certain that the job is lost and hence can prepare for the future (e.g., by looking for employment). Employees who feel insecure cannot prepare themselves to the same extent, because they do not know if they should take action or not. Finally, definitions regarding job insecurity also contain references to its *involuntary* nature (Sverke and Hellgren 2002). Job insecurity implies a discrepancy between what people wish for (certainty about the future of their current employment) and what people 'get' (the perception that the current job is threatened).

Different types of job insecurity can be distinguished. First, some authors distinguish between the (cognitive) possibility of job loss ('probability'; 'I *think* that I will become unemployed') and the affective experience thereof ('I am *scared* that I will become unemployed') (Borg 1992). Research however suggests that there is

strong correlation between both aspects, and, accordingly, homogeneous scales containing both cognitive and affective items have been presented (e.g., Vander Elst et al. 2014a). Second, a distinction can be made between quantitative and qualitative job insecurity (Hellgren et al. 1999). *Quantitative* job insecurity concerns the retention (or loss) of one's job *as such*: workers are uncertain whether they will be able to keep their job or not. *Qualitative* job insecurity refers to uncertainty about retaining valued job aspects, and thus concerns uncertainty about the quality of the job in the future. Workers experiencing qualitative job insecurity are insecure about aspects such as working conditions, wage, career opportunities and their colleagues or supervisor in the future. In this chapter we will mainly concentrate on quantitative job insecurity, which concerns the perception that one may lose one's current job, as most research has focussed on this dimension. Some scholars also assume that particularly this type of job insecurity has important implications for employees' health and well-being (Greenhalgh and Rosenblatt 1984). Note, however, that both kinds of insecurity tend to be strongly correlated: losing the job obviously also implies losing valued aspects of that job (e.g., De Witte et al. 2010; Hellgren et al. 1999).

7.3 How Many Employees, and Who Feels Insecure?

The media often provide varying percentages regarding the extent of job insecurity. The diversity in figures is caused by differences in measurements and by the fact that one often reports results of convenience samples instead of representative surveys. Erlinghagen (2008) based his findings on the 'European Social Survey', carried out in 2004 and 2005 in 17 European countries. In these countries, 14 % of respondents did *not* agree with the cognitive item 'My job is secure'. The percentage of insecure employees varied between countries, from 9 % in Austria to slightly more than 26 % in France. Anderson and Pontusson (2007) reported results of the data of the 1997 'International Social Survey Program', collected in 15 OECD countries. About 20–25 % of the respondents responded positively to the affective item 'Do you worry about the possibilities of losing your job?' Here too, the percentage varied between countries, from 11 % in Norway to no less than 54 % in Spain. Overall, job insecurity is thus a reality for a (sometimes rather large) 'minority' of the working population. Note, however, that such a minority mounts to a rather sizeable number of workers in absolute figures.

The perception of job insecurity is linked to the level (and the evolution) of unemployment in a country (Brochu and Zhou 2009), which partly accounts for some of the variation in job insecurity between countries mentioned earlier. Within countries, differences are due to sectorial and organisational variables, such as working in the government sector (higher protection, thus low job insecurity), restructurings and/or dismissals in the actual organisation in the past (more dismissals, more job insecurity), and the percentage of temporary employees in the company (higher percentage, more job insecurity) (De Cuyper et al. 2009b; Muñoz de Bustillo and de Pedraza 2010). Finally, job insecurity is also associated with

demographical and work-related variables determining the labour market opportunities of an employee. Research in various European countries shows that blue-collar workers, low skilled employees and employees in industry perceive more job insecurity (e.g., Erlinghagen 2008; Näswall and De Witte 2003). This is not surprising, as these categories of employees have a greater ('objective') chance of being dismissed. Additionally, job insecurity is also associated with the employment contract: temporary employees experience more job insecurity than employees on a permanent contract (Klandermans et al. 2010).

7.4 Health and Well-Being Outcomes of Job Insecurity

Job insecurity is part of the many psychosocial hazards at work: aspects of the design and management of work and its social and organizational context, that have the potential for causing psychological or physical harm (Leka and Jain 2010). Job insecurity is therefore considered as a work *stressor* in the literature (Ashford et al. 1989). Work stressors are demanding aspects of the job with negative consequences for (somatic) health and (psychological) well-being of individual employees. An overview of the available literature provides a long list of the negative outcomes of job insecurity (e.g., De Witte 1999, 2005; Ferrie 2001; Probst 2008; Sverke and Hellgren 2002). Job insecurity has, for instance, been associated with lower mental well-being and physical health complaints, both on a general (e.g., anxiety, high blood pressure) and work-related level (e.g., reduced job satisfaction, absenteeism).

The increase in studies on job insecurity and its outcomes allowed to perform two meta-analyses. In 2002, Sverke et al. published a meta-analysis of 72 studies. In 2008, their study was followed by the meta-analysis of Cheng and Chan covering 133 studies. Table 7.1 contains an overview of the results of both studies concerning individual health and well-being.

The results show that job insecurity correlates negatively with job satisfaction, mental well-being and physical health. This underlines the stressful nature of job insecurity: it is harmful to be insecure about the future of one's job. Furthermore, Table 7.1 reveals some interesting different results for different types of outcomes. Job insecurity shows the strongest correlation with an indicator of well-being at work: job satisfaction. In the study of Sverke et al. (2002),

Table 7.1 Overview of the results of two meta analyses on the associations of job insecurity (meta correlations)

	Sverke et al. (2002)	Cheng and Chan (2008)
Health and well-being		
Job satisfaction	-.41	-.43
Mental well-being	-.24	-.28
Physical health	-.16	-.23

the meta-correlation for job satisfaction is almost twice the size of that of mental well-being. The meta-correlation for physical health is lower than the meta-correlation for mental well-being. This suggests a gradient in the relationships of job insecurity with outcomes. Job insecurity is strongly linked to reduced well-being at work (e.g., job satisfaction). The influence on aspects of health and well-being *outside* the workplace is slightly more limited, although still substantial. Finally, it is notable that, although all meta-correlations increased in size in the study of Cheng and Chan (2008) compared to the study of Sverke et al. (2002), the gradation of the associations is the same in both studies: the strongest association is reported with job satisfaction, the weakest with physical health.

The list of negative consequences of job insecurity for health and well-being can be completed by aspects not included in the meta-analyses. A typical example of a *mental stress reaction* is the reduction of mental well-being, as measured by the General Health Questionnaire-12 (GHQ-12; Goldberg 1972). Research documents lower scores on the GHQ-12 for those who feel insecure (e.g., De Witte 1999). Research equally shows that job insecurity is associated with a multitude of specific mental stress reactions, such as anxiety (Burchell 2009), irritation (Otto et al. 2011), depressive symptoms, hostility and loneliness (Kalil et al. 2010). Furthermore, a consistently lower score for life satisfaction has been found in several studies (Green 2011; Sora et al. 2011). Mental stress reactions can also be operationalized in terms of work-related well-being. Job insecurity is linked to less favourable scores on the three dimensions of burnout (Dekker and Schaufeli 1995; De Witte et al. 2010; Kausto et al. 2005) and to reduced work engagement (De Cuyper et al. 2008; Mauno et al. 2005). This suggests that job insecurity can be energy draining (e.g., more emotional exhaustion (as part of the burnout syndrome) and less vigour (as part of work engagement)), and seems to affect the identification of employees with their jobs (e.g., more depersonalisation (as part of the burnout syndrome) and less dedication (as part of work engagement)). Job insecurity is also associated with specific measurements of work-related strain (Näswall et al. 2005) and with higher levels of need for recovery (Kinnunen et al. 2010; Schreurs et al. 2010).

In the results discussed above, a distinction was made between well-being at work and well-being outside work. This distinction relates to Warr's distinction between 'context specific' (e.g., at work) and 'context free' mental well-being (Warr 2007). This distinction raises the issue of the relationship between both dimensions and job insecurity. It could be that job insecurity is only related to 'context free' well-being because of its association with well-being at work. In this view, job insecurity 'only' directly affects work-related well-being (e.g., job satisfaction or burnout), which in turns impacts upon broader and more general dimensions of well-being (the 'spill over' hypothesis; e.g., Spector 1997), suggesting a full mediation of the job insecurity – general well-being relationship through work-related well-being. Research however disconfirms the full mediational view. Job insecurity is still negatively related to life satisfaction and feelings of happiness, after statistically controlling for job satisfaction (De Witte 2003). A more extensive test of Handaja and De Witte (2007) led to the same conclusion. Taken together, these findings suggest that job insecurity is not only problematic for well-being at work

(e.g., job satisfaction), but crosses job borders by also having a direct negative impact on well-being outside of work.

A typical example of a *physical stress reaction* is (self-reported) somatic health. Laszlo et al. (2010) found a consistently negative association with somatic health in 16 countries. Correlations with psychosomatic symptoms (Burchell 2009; Mohr 2000) and sleeping disorders (Virtanen et al. 2011) have also been reported. Job insecurity is also associated with various physiological variables, such as increased blood pressure and an increase in catecholamines (Kalil et al. 2010) and cholesterol (Muntaner et al. 1998). Not surprisingly given these findings, job insecurity is also associated with health problems varying from increased receptiveness for infections such as colds and flu (Mohren et al. 2003), to calcification of the arteries (Muntaner et al. 1998), an increased possibility of heart disease (Siegrist 1995) and non-fatal heart attacks in the short run (Lee et al. 2004).

Finally, correlations are also found between job insecurity and an increase in the use of medicines such as antidepressants (Rugulies et al. 2010) and of smoking (Mohren et al. 2003). These aspects relate to *behavioural stress reactions*. In addition, job insecurity is linked to an increase in the consultation of doctors (Roskies and Louis-Guerin 1990) and complicates the rehabilitation of back injuries (Thali et al. 1994). Job insecurity is positively associated with absenteeism at the workplace (De Witte et al. 2010; D'Souza et al. 2006): insecure employees more often call in sick. Interestingly, research shows that the increase in absenteeism during downsizing is (partially) due to the increase in job insecurity caused by the restructuring process (Kivimaki et al. 2000).

Note that the consequences of job insecurity are not limited to the individual. Research shows that job insecurity also influences *family life* and the *work-home* interference. Scandinavian studies show that job insecurity is associated with work-family conflicts (Richter et al. 2010). Burnout due to job insecurity can even be transferred to the partner (Westman et al. 2001) and may complicate marital life (Barling and McEwen 1992). Job insecurity felt by parents also influences their children. It exerts a negative influence on their children's attitudes towards employment in general, as well as their school achievements (Barling et al. 1998, 1999).

Job insecurity research mostly focuses on the quantitative variant of job insecurity, defined as the perceived probability of losing one's job and the worries related to that perception. *Qualitative* job insecurity on the other hand, referring to the perceived probability and fear of losing valued job features (Hellgren et al. 1999; see above), has been investigated much less frequently. Recently, however, some studies linking qualitative job insecurity to health and well-being have been reported. The distinction between quantitative and qualitative job insecurity evokes the question as to which job insecurity type is more problematic. Greenhalgh and Rosenblatt (1984) assume that quantitative job insecurity is more problematic than qualitative job insecurity, because with quantitative job insecurity there is more to lose: there is the risk of losing the entire job and not just a few important aspects. The job may become less attractive on a qualitative level, but it does not disappear altogether. This leads to the assumption of quantitative job insecurity leading to stronger negative consequences. Other authors (e.g., De Cuyper and De Witte 2008) state that

quantitative and qualitative job insecurity can both cause perceptions of psychological contract breach, e.g., job insecurity may present a violation of the employer's obligations to provide job security in return for employees' efforts and loyalty. This leads to the hypothesis of equal strength of relationships with poor well-being. The strength of relationships could also be conditional upon the specific outcome under consideration (Hellgren et al. 1999): quantitative job insecurity may more strongly relate to (general) mental well-being, possibly because one risks to lose the job as such; whereas qualitative job insecurity could be more important for specific (e.g., less encompassing) aspects of well-being such as job related attitudes, as the job as such will not be lost. This argument mirrors the first view, stating that quantitative job insecurity might have a stronger impact.

The results of the comparison of both kinds of job insecurity thus far are however equivocal. In their study, Hellgren et al. (1999) indeed found that quantitative job insecurity predicted physical health and psychological well-being, whereas qualitative job insecurity primarily predicted job satisfaction and turnover intentions. Although both types were associated with psychological well-being in the study of Roskies and Louis-Guerin (1990), job satisfaction was more strongly related to qualitative than to quantitative job insecurity. Handaja and De Witte (2007) used a more differentiated measurement of qualitative job insecurity. They also found that qualitative job insecurity explained more variance in job satisfaction and psychological well-being than quantitative job insecurity. Finally, the most encompassing study analysed a wide range of outcome variables, such as job satisfaction, the three burnout dimensions, psychological well-being, psychosomatic complaints, absenteeism and visits to the doctor (De Witte et al. 2010). This time, the results did not produce clear differences. Both types of job insecurity – independent of one another – were associated to almost all outcome variables in the same way. This leads to the global conclusion that both types of job insecurity seem to be problematic for health and well-being, even though the relative importance of both types may depend on the operationalisation and the specific sample under study.

7.5 Is Job Insecurity Causing Lower Levels of Health and Well-Being?

Thus far, we have been discussing correlations between job insecurity and various health and well-being outcomes, with the implicit assumption that job insecurity *affects* these outcomes. Longitudinal research supports this view, and enables to conclude that job insecurity indeed causes the consequences discussed earlier. Studies show that job insecurity influences psychological well-being and somatic health at a later stage, suggesting a causal impact (Ferrie et al. 2005; Kalil et al. 2010; Virtanen et al. 2011). A variety of phenomena, such as job satisfaction (Probst and Brubaker 2001), the use of antidepressants (Rugulies et al. 2010), being sensitive to infections such as colds and flu (Mohren et al. 2003) and conflicts between work and family (Richter et al. 2010) can be predicted by perceived job insecurity

in the past. Some studies furthermore suggests that the influence of job insecurity on well-being ('normal causation') is more important than the influence of well-being on perceived job insecurity ('reversed causation'), while other studies highlight the possibility of reciprocal causation: job insecurity causes detrimental health and well-being rather than the other way round, or there is a mutual influence between job insecurity and well-being, respectively. The study by Hellgren and Sverke (2003) illustrates the idea of normal causation. The authors compared various causal models. Only the model in which job insecurity influences psychological well-being at a later stage was confirmed. The model assuming the opposite impact was refuted. Concerning reciprocal causation, De Cuyper et al. (2012) recently established reciprocal cross-lagged relationships between job insecurity and emotional exhaustion. Similarly, Kinnunen et al. (2003) found that job insecurity lowered self-esteem in the long run, while lower self-esteem eventually also increased job insecurity. These studies show that a negative spiral can develop, whereby perceived job insecurity and its consequences strengthen one another over time.

Another conclusion from longitudinal research is that (continuous) *job insecurity* is *more problematic* for well-being than actual *dismissal*. Dekker and Schaufeli (1995) surveyed employees who were insecure about their job at Time 1. Two months later a group was informed about their dismissal, while the fate of the second group remained uncertain. Surprisingly, the well-being of the dismissed group increased after they were given clarity about the future of their job. The well-being of the second group remained low. This suggests that employees prefer certainty above uncertainty, even in the case of certainty about job loss. The reason may relate to regained feelings of control over one's own life and over the future (see below). The informed workers could start preparing to deal with their dismissal and to look for a new job.

Research finally also shows that job insecurity is a *chronic* stressor (Van Vuuren 1990; Mauno et al. 2001). Uncertainty about one's job is a rather enduring experience, and is harmful to health and well-being in the short as well as in the long run. The continuous experience of uncertainty has a *cumulative* impact on future well-being. Those who, in the longitudinal research of Van Vuuren (1990), felt uncertain at both time points, showed the lowest level of well-being.

7.6 Why Is Job Insecurity Detrimental? Looking for Explanations

The negative consequences of job insecurity can be *explained* based on diverse, but complementary *theoretical* perspectives. Quantitative job insecurity refers to the perception that employees may lose their current job. It is not surprising that this perception is problematic, given the importance of work. In our society, work represents the key to social participation and integration. These notions are central to Jahoda's *latent deprivation* model (Jahoda 1982). In this model, Jahoda maps the functions of work, such as earning an income, acquiring status and establishing

social contacts outside the family circle, enabling to structure time and to develop oneself individually and socially. These functions satisfy important needs. Being threatened with job loss potentially leads to the anticipated frustration of these work needs. Besides loss of earnings, job loss also implies the loss of for instance the opportunity to develop one's talents, to gain status and to develop social contacts, which cumulates in the threat of being excluded socially. Job insecurity thus threatens the future employment of employees, and therefore also the satisfaction of fundamental needs fulfilled by work.

The notion of need frustration as explanation is further developed in Self-Determination Theory (SDT; Ryan and Deci 2000; Van den Broeck et al. 2008). This theory suggests that job insecurity is problematic, because it frustrates the three *basic psychological needs* postulated by SDT (Vander Elst et al. 2012). The need for autonomy represents individuals' inherent desire to experience a general sense of choice and volition. It refers to having authorship of one's actions and to feel psychologically free. The need for belongingness refers to the propensity to feel connected to others, and to experience intense, meaningful social relations. The need for competence refers to individuals' inclination to influence the environment and to obtain desired outcomes. Job insecurity can frustrate these basic needs. It implies an involuntary and unwanted change concerning the continuity of the job (frustration of autonomy). Additionally, job insecurity implies the possible loss of (one's own position in) the team, together with the risk of increasing social tensions through, for example, the increase of competition and rumours (frustration of belongingness). Job insecure employees also experience difficulties undertaking action to oppose job insecurity, as this phenomenon is characterized by the lack of clarity about the future (competence frustration). In their study, Vander Elst et al. (2012) indeed showed that the frustration of these three basic psychological needs mediates the association of job insecurity with burnout and work engagement.

Additionally, two factors central to *job stress* research play a role: predictability and controllability. Job insecurity first of all implies *unpredictability*: for the person involved, it is unclear what the future holds. This makes it difficult to react adequately, because it is unclear *if* one should undertake action or not. In his 'vitamin' model, Warr shows that unpredictability (as part of the broader dimension 'environmental clarity') reduces psychological well-being (Warr 2007). Besides unpredictability, uncontrollability is probably even more important. Job insecurity is problematic because it implies powerlessness or a lack of control (Vander Elst et al. 2011, 2014b). Employees who are insecure about keeping their job or valued job characteristics can usually do very little to decrease their insecurity. Mostly, they have no influence on the decision whether they will be dismissed or not, or whether they will keep valued job characteristics, as such decision are typically taken on a higher, transnational management level. Research indicates that feelings of powerlessness erode mental and physical health (Warr 2007). Vander Elst et al. (2011), for instance, found empirical evidence for the hypothesis that a lack of control mediates the relationship between quantitative job insecurity, and job satisfaction and mental health. This may explain the increase in well-being of employees

who (after prolonged insecurity) obtain certainty about their dismissal (Dekker and Schaufeli 1995). For them the future finally becomes controllable, because at last they know where they stand.

The negative consequences of job insecurity can also be explained by the experience of a *breach* of the (relational) *psychological contract* (De Cuyper and De Witte 2006, 2008). The psychological contract refers to ‘the idiosyncratic set of reciprocal expectations held by employees concerning their obligations and their entitlements’ (McLean Parks et al. 1998, p. 698). The relational psychological contract, typical for employees with a long tenure in a company, focuses upon socio-emotional exchange between employees and employer. Typical elements are job security in exchange for loyalty and dedication. Job insecure employees experience a breach of their psychological contract: they feel that their loyalty and dedication is not rewarded, because they do not experience job security. A breach of the psychological contract has negative consequences for the well-being of the employee involved, because he/she feels treated unfairly and betrayed. De Cuyper and De Witte (2006) found empirical evidence for this hypothesis: the relationship between job insecurity, and job satisfaction and life satisfaction was mediated by the perception that their relational psychological contract was breached.

7.7 But It Depends: Moderators Can Buffer the Consequences of Job Insecurity

Job stress research is traditionally looking for variables that moderate the association between a stressor and its consequences. Specific variables can indeed weaken (or boost) the impact of job insecurity on health and well-being (Greenhalgh and Rosenblatt 1984). Because job insecurity is determined by the economic situation, feelings of job insecurity can often not be avoided. Therefore, it becomes important to find variables that can buffer the consequences of job insecurity. Likewise, it seems wise to identify variables that might strengthen its impact. These *moderators* offer important practical clues for the development of interventions (Sverke and Hellgren 2002): buffers need to be strengthened, whereas boosting factors need to be avoided or reduced.

A first set of moderators concerns *demographic* and *work-related* background variables, such as gender, age and occupational position. These demographics are of course difficult to influence. Policy makers and HR professionals can however use these findings to develop their policies, as these moderators evidence that some categories of employees can experience job insecurity in a different way. Sverke et al. (2002) demonstrated in their meta-analysis that the association between job insecurity and various consequences varies according to occupational position: blue-collar workers experience job insecurity in a more detrimental way than white-collar workers. This suggests that blue-collar workers are ‘hit twice’ by job insecurity. Because of their weaker position on the labour market, they experience more

job insecurity (a higher average level), whereas they are also more strongly affected by the same level of job insecurity (stronger correlation with stress reactions). Furthermore, in their meta-analysis, Cheng and Chan (2008) found moderation by age. Job insecurity is more strongly associated with turnover intentions among the young workforce, as compared to their older peers. Younger employees probably perceive more opportunities for themselves on the labour market. As a consequence, they can more rapidly change jobs when experiencing job insecurity. For older workers, job insecurity is more strongly related to decreased psychological well-being and reduced physical health. This suggests that older employees constitute a risk group: they may experience fewer possibilities of escaping job insecurity and are more burdened by it than younger people. No differences according to gender were found: men and women experience job insecurity in the same way.

A relatively important amount of research on job insecurity focussed on *temporary* employees. Temporary employment concerns ‘dependent employment of limited duration’ (OECD 2002, p. 170), for example in the form of temporary or fixed-term contracts. Studies on the relationship between temporary employment and employees’ health and well-being are inconclusive (for reviews, see e.g., De Cuyper et al. 2008; Virtanen et al. 2005). The results from a large scale European project (Guest et al. 2010) for example demonstrate little differences between temporary and permanent workers regarding work related attitudes and well-being. Although temporary employees are much more insecure about their job than permanent employees (see above), job insecurity among temporary employees is only weakly associated (if associated at all) with negative consequences (Bernhardt-Oettel et al. 2005; De Cuyper et al. 2010; De Witte and Näswall 2003). This association is much stronger among employees with a permanent contract. Temporary employees are thus more insecure, but this does not translate into negative consequences. A possible explanation relates to the psychological contract of temporary employees (De Cuyper and De Witte 2008): temporary employees do not expect job security from their employer. As stated above, job security belongs to the (relational) psychological contract of permanent employees. Job insecurity breaches the expectations of the permanent employees, leading to negative consequences. Temporary employees know that job insecurity is a part of their labour relation: job insecurity does not breach their psychological contract and is therefore less problematic.

Causal attributions and coping styles have also been investigated as moderators of the job insecurity – well-being relationship. Attributing the cause of job insecurity to an internal, uncontrollable factor (e.g., one’s age) strengthens the association between job insecurity and feelings of depression, psychosomatic complaints or job dissatisfaction (van Vuuren 1990), since employees think that nothing can be done. This finding fits the view that uncontrollability explains the detrimental consequences of job insecurity. Coping styles are also relevant. Employees using avoidance as coping strategy to handle stress report more psychological complaints when insecure about their jobs (van Vuuren et al. 1991). These findings suggest that internal uncontrollable attributions and avoidance coping styles boost the impact of job insecurity, and should be avoided.

A moderator that attracted increasingly more research over the past few years, is perceived *employability*, which concerns the assessment of the employee of his chance of finding another job (Berntson and Marklund 2007). Job insecurity and perceived employability are partly comparable: Employability and job insecurity are both subjective perceptions regarding the future. Job insecurity, however, is about the future of the current job, whereas perceived employability concerns future jobs, with the current employer as well as other employers (De Cuyper and De Witte 2011). Perceived employability is often mentioned as a buffer of the relationship between job insecurity and its consequences (De Cuyper et al. 2008): job insecurity is not as detrimental when employees perceive alternative employment opportunities. Perceived employability conveys that employees experience control over their fate and future, which reduces the effects of a job stressor – in this case, job insecurity (Silla et al. 2009). Various studies support the interaction between job insecurity and perceived employability in relation to well-being (Berntson et al. 2010; Green 2011). Improving the availability of alternative employment options and employees' employment skills may thus become important, as they may directly reduce job insecurity and/or can buffer its aversive consequences. Researchers should however be wary of advancing perceived employability as the ultimate answer to all problems associated with job insecurity. The reason is that perceived employability may trigger unintended side effects. For example, De Cuyper et al. (2009a) established that job insecurity may relate to workplace bullying, particularly among those who feel highly employable. Our conclusion is that perceived employability is important, but should be monitored carefully. The latter leads us to suggestions for practice.

7.8 What Can We Do? Suggestions for Practice

The findings in this chapter emphasize that job insecurity is a problematic phenomenon. As a consequence, psychologists and social scientists need to develop interventions to fight its negative effects. Some suggestions have already been discussed elsewhere and relate to, for example, organisational justice, social support and the need to restore the effort-reward imbalance (De Witte 2005). In this chapter, some additional ideas will be presented. The finding that job insecurity is problematic because it implies a lack of *control*, provides a practical point of departure. Two routes could be followed in developing interventions. First of all, job insecurity could be directly reduced by interventions that may increase experienced control at work. The focus of such interventions is thus on control as an *antecedent* of job (in) security. Secondly, interventions increasing control may also act as buffers of the relationship between job insecurity and its consequences. These kind of interventions focus on control as a *moderator*. Three variables are relevant in pursuing both routes: communication, participation and employability.

First of all, one needs to reduce insecurity as such. One of the causes of insecurity is the lack of *communication* about what will happen in the future. Research

shows that explicit communication about future organisational plans is effective in reducing insecurity (Huang et al. 2012; Schweiger and DeNisi 1991; Vander Elst et al. 2010). Open and timely communication not only increases the predictability and controllability of what is to come, it also contributes to the experience that one is valued and respected by company management. *Participation* in decision making about the future of the organization also reduces insecurity (Probst 2005). Also in this way employees increase their control over the situation, while participation in the decision making process also increases the predictability of events. As indicated above, perceived *employability* implies the experience of control over the future. Research shows that this perception effectively directly reduces perceived job insecurity (De Cuyper et al. 2008, 2012). Organizations can thus work in a preventive way by strengthening relevant skills of their employees, which will lead to fewer problems in an eventual search for a new job.

However, reducing job insecurity as such is not always possible. A certain amount of insecurity about the future seems unavoidable in economically turbulent times. Therefore, one also needs to develop interventions to *buffer* the negative consequences of job insecurity. Here too, the same three variables can play a role. Increasing communication, participation and employability will increase the employee's perceptions of control, which in turn buffers stress reactions (Folkman 1984). Vander Elst et al. (2011) analysed the moderating role of communication and participation. Organizational participation buffered the negative relationship between job insecurity and work engagement, whereas communication did not. Jiang and Probst (2013), however, found that higher levels of positive organizational communication practices buffered the association of job insecurity with job satisfaction and health complaints. The moderating role of perceived employability is also confirmed in empirical research (Green 2011; Kang et al. 2012; Kirves et al. 2011). As mentioned earlier, a higher level of employability did buffer the negative relationship between job insecurity and life satisfaction in the study of Silla and colleagues (2009).

These findings can be used to generate specific *interventions*. Schweiger and Denisi (1991) developed and tested a *communication* program in the context of a merger. Insecurity and its negative outcomes, resulting from the announcement of the merger, decreased among participants of a realistic communication intervention (compared to a control group), both in the short and the long term. This communication program aimed at providing frequent, honest and relevant information about the merger, fair treatment of the employees, and responding to employees' questions and concerns. These aims were realized by means of a merger newsletter, a telephone hotline and weekly meetings with the manager.

Probst (2005) presents *participative decision making* as a cost-effective intervention in job insecure work situations: It can be implemented at a relatively low cost and may have additional financial benefits resulting from positive outcomes, such as increased health, job satisfaction and reduced absenteeism. Intervention studies demonstrate the benefits of organizational participation for employee well-being. Mikkelsen et al. (2000), for instance, reported a long-term effect of a 'direct participatory organizational intervention' on work-related stress. The intervention was

directed at identifying and solving work problems in order to stimulate employee health and organizational performance. It started with a seminar in which employees were asked to think about points of improvements and actions in their work environment. This resulted in seven work groups, including employees and supervisors, which discussed a specific work point and formulated remediable actions throughout nine meetings. In dialogue with a consultant, the management and the union representatives, these work groups suggested specific actions plans. A similar intervention could be developed when dealing with job insecurity.

Interventions may also attempt to increase the workers' *employability*. Some interventions may focus upon reducing employee perceptions of insecurity. For example, managers may help employees to define a career path within the organization as a way to increase internal employability. Other interventions may focus upon reducing the negative impact of felt job insecurity by providing an alternative in the form of employability. For example, access to job counselling may help to emotionally deal with career and job insecurity concerns, and it may provide workers with up to date knowledge about the labour market and a prospect on alternative employment opportunities. Likewise, the organization may provide general training that is transferable across jobs and organizations. These are all critical to sustain employability. Moreover, such interventions have a positive side effect for organizations: they signal that an organization takes up social responsibility (Kang et al. 2012).

Finally, macro level interventions are also needed. In this volume, Berglund in Chap. 9 states that the expenditures of governments on labour market policies has the potential to reduce perceived job insecurity. Based on the ECWS data from 2010, he shows that investments in social protection (e.g. increasing unemployment benefits) is associated with reduced levels of job insecurity. Next to such 'passive' labour market policies, also 'active' labour market policies seem relevant. Adapting the human capital of the unemployed to labour market demands by providing vocational training and stimulating job search efforts also decrease perceptions of job insecurity, as well as creating and/or subsidizing new jobs. An interesting finding is that government investments in labour market policies also reduce the impact of job insecurity on mental well-being, suggesting that macro levels interventions also function as buffers in the job insecurity – strain relationship discussed in this chapter.

7.9 Conclusion

In this chapter, the consequences of job insecurity for health and well-being have been discussed, and some explanations and possible solutions have been mentioned. A lot still needs to be studied, such as the impact of job insecurity on health behaviours (and performance), and the differential impact of various operationalisations of the job insecurity concept (e.g., quantitative versus qualitative job insecurity). One of the issues that have been underdeveloped relates to cross-national comparisons: are the consequences of job insecurity for health and well-being identical in

all countries, and what variables on the country level (e.g., culture, legislation and social security system) account for possible differences?¹ We also need to deepen job insecurity research by further developing and testing theoretical explanations of job insecurity and its consequences. The use of more complex longitudinal research designs in which, for instance, multi-mediational paths are tested, and of diary studies seems warranted in this regard. Finally, there is a clear need to develop a coherent set of interventions to reduce job insecurity and its detrimental consequences. The search of theoretical explanations for the negative consequences of job insecurity and for buffers of the insecurity-outcome relationship is important in this regard, as these findings will offer a point of departure for the design of such interventions. These interventions need to be tested and evaluated empirically too, to assess their effectiveness. Job insecurity is the consequence of actual economic transformations, and will not disappear soon. Developing and testing interventions to cope with this phenomenon therefore becomes one of the core tasks of scientists in this field.

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¹For an interesting example, see e.g., König et al. (2011).

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Chapter 8

Principles for Effective Coping in Work-Related Uncertain Situations

Kate Sweeny and Arezou Ghane

8.1 Introduction

8.1.1 Principles for Effective Coping in Uncertain Situations

Whether applying to work in a new field, awaiting a promotion, or facing company layoffs and other threats to job security, professionals at many levels experience uncertainty related to their work. Although people typically are remarkably skilled at adapting to difficult life events, people nonetheless experience high levels of anxiety over the uncertainty that accompanies such milestones (Behar 2001; Penrod 2001, 2002; Reiman et al. 1989). In fact, research on affective forecasting suggests that uncertainty may be more painful than even the worst-case scenario people fear. That is, people significantly overestimate the blow that a bad outcome will deal them, such that they very often surpass their own predictions about how readily they will adapt to an event like a job loss or failure to get tenure in an academic position (Gilbert et al. 1998).

In this chapter, we use the *uncertainty navigation model* (Sweeny and Cavanaugh 2012; Fig. 8.1) to enumerate the various strategies people use to navigate job insecurity and the advantages and disadvantages associated with each strategy. We also discuss some of the individual and situational variables (e.g., moderators) that may play a role in how people respond to uncertainty and job insecurity. Finally, we present some initial recommendations for how to adapt these empirically-supported strategies to the context of work-related uncertainty.

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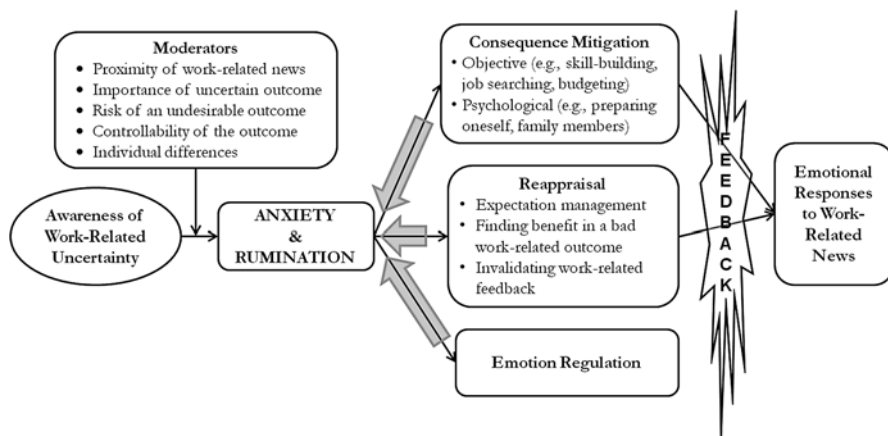


Fig. 8.1 A model of work-related uncertainty navigation (Revised and adapted from Sweeny and Cavanaugh 2012)

8.1.2 A Conceptual Model of Uncertainty Navigation

A vast body of research has examined strategies people use to cope with various types of stressful life events (Carver and Connor-Smith 2010; Carver and Scheier 1999; Folkman and Moskowitz 2004; Lazarus and Folkman 1991); however, the process of coping with uncertainty presents the added tension of not knowing what an outcome will be (Sweeny 2012). People are better able to mobilize towards adaptation once a negative life event occurs. For example, being rejected from a potential new position allows candidates to reinvest their effort in looking for other positions. Prior to learning the outcome of a job interview, however, candidates are relegated to waiting without knowing an appropriate way to direct their efforts. In those moments of uncertainty, people may engage in proactive coping, which entails active attempts to prevent a feared outcome or to mitigate unpleasant consequences of that outcome if it occurs (Aspinwall and Taylor 1997; Greenglass 2002). In many cases, however, people have little or no opportunity to improve their chances of a desirable outcome, and they must instead find ways to cope with the discomfort of uncertainty itself.

Given people's common responses to uncertainty, the singer Tom Petty seems to have famously expressed a widely-experienced phenomenon: "The waiting is the hardest part." Researchers documented the stress associated with uncertainty long ago, demonstrating that even an aversive event is improbable, people nonetheless experience anxiety over the possibility of a negative outcome (Epstein et al. 1978). Work-related uncertainty presents its own unique set of consequences. Specifically, job insecurity is linked with decreased well-being and job satisfaction and worsening physical and psychological symptoms (Witte 1999; László et al. 2010; Silla et al. 2009), and work-related uncertainty (i.e., uncertainty about the effects of a

major restructuring process) predicts psychological strain, particularly emotional exhaustion associated with burnout (Bordia et al. 2004). Similarly, perceptions of career-related control predicted emotional exhaustion, such that people who reported less uncertainty with regard to their work (e.g., a sense of clarity about the tasks expected of them, a sense of mobility and adaptability, less dependence on or attachment to the job) reported fewer negative emotional outcomes related to their work compared to people who reported less career-related control (Ito and Brotheridge 2001).

The basis for the uncertainty navigation model is the substantial literature on one particularly well-documented response to uncertainty: bracing for the worst. Although people typically embrace optimism about their future outcomes, they strategically shift their expectations toward realism or even pessimism when the threat of uncertainty becomes salient in an effort to minimize or avoid the unpleasant surprise of bad news. Support for bracing spans a variety of contexts and populations faced with uncertainty, suggesting that the phenomenon is quite robust (e.g., Armor and Sackett 2006; Gilovich et al. 1993; Savitsky et al. 1998; Shepperd et al. 1996; Sweeny and Krizan 2013).

The uncertainty navigation model extends the research on bracing to include additional variables that predict the extent to which uncertainty is likely to be anxiety-provoking and additional strategies people can use to manage uncertain situations (see Fig. 8.1). For example, in a work context, external reminders (e.g., witnessing a friend or co-worker being laid-off) of career-related uncertainty, or internal reminders (e.g., rumination) of career-related uncertainty can trigger the process of uncertainty navigation. Once people become aware of the uncertainty, the model depicts a number of ways they can respond: (1) consequence mitigation, (2) reappraisal, and (3) emotion regulation. People may use several strategies simultaneously or may vacillate between strategies as some become more useful and others become ineffective, and people also vary in the extent to which some strategies may be effective for them. We will touch on these issues throughout the chapter to the extent that empirical evidence is available.

8.1.3 Consequence Mitigation

People can engage in objective or psychological consequence mitigation to reduce anxiety over uncertain professional situations and to prepare themselves to respond effectively if the outcome is bad. Similar to the concept of problem-focused coping (Folkman and Lazarus 1980), objective consequence mitigation refers to actions taken to buffer against concrete “fall-out” from a negative outcome. This aspect of uncertainty navigation is most similar to proactive coping (Aspinwall and Taylor 1997; Greenglass 2002), as described earlier. For example, a recent college graduate who will soon face the job market might take an immersion course in another language or take on other resume-boosting endeavors in the months prior to interviewing for jobs. Similarly, this job candidate might also apply to less desirable positions as a

“plan B” in the event that the job search does not pan out exactly how as hoped. These efforts to minimize the negative consequences of an unsuccessful job search can reduce feelings of anxiety over the uncertainty of the job market by conferring a sense of preparedness (Carroll et al. 2006) while also providing a very real safety net in the case of an undesirable outcome.

In this same way, people can engage in psychological consequence mitigation, which is similar to what the coping literature refers to as emotion-focused coping (Folkman and Lazarus 1980). One example of preparing for potential negative psychological outcomes is to rehearse emotional responses to bad news (Feldman and Hayes 2005; Taylor et al. 1998). In terms of work-related uncertainty, workers who witness lay-offs occurring in their workplace might imagine themselves in the position of being laid-off and begin to practice a well-sculpted response to their superiors, so as to appear graceful and professional if the lay-offs come their way.

Developing concrete plans in preparation for the worst-case scenario offers the potential benefit of recovering more quickly in the aftermath of a negative outcome. Rather than being paralyzed by the failure to secure a dream job, a candidate who has a back-up plan might be able to buy some time to continue the search for a better position without the financial burden of unemployment. Similarly, employees who have already imagined how they might react to the news of being laid-off might be less emotionally devastated by a pink slip compared to employees who never contemplated the emotional aftermath of losing a job. However, these strategies require a significant effort and energy, which may seem wasted in the event that the uncertainty resolves in a positive way.

8.1.4 Reappraisal

A second set of strategies in the uncertainty navigation model involves reappraising the target of uncertainty to make it less threatening. Reappraisal of uncertainty can occur through one of three related but distinct tactics: (1) expectation management, (2) benefit-finding, and (3) invalidating feedback.

8.1.4.1 Expectation Management

Expectation management refers to the process of determining an appropriate prediction about one’s likely outcomes (Sweeny and Cavanaugh 2012). This reappraisal process includes efforts to both accurately anticipate an uncertain outcome and to strategically prepare for the best and the worst. As discussed earlier, bracing for the worst is one expectation management strategy that involves strategically lowering expectations in the face of imminent feedback (Sweeny et al. 2006). Across several contexts and populations, researchers have found that people consistently abandon

optimistic expectations in anticipation of potentially bad news (Sweeny and Krizan 2013) and that bracing serves as a buffer against the blow of an otherwise unexpected negative outcome (Krizan and Sweeny 2013; Shepperd and McNulty 2002; Sweeny and Shepperd 2010).

Imagine an employee who is up for an annual performance evaluation, with the promise of a promotion if the evaluation goes well. Although the employee may have worked hard throughout the year and may feel confident about the possibility of promotion when the performance evaluation is weeks away, this employee may nonetheless brace for the worst as the evaluation day draws near. Research suggests that this uncertainty navigation strategy is largely “win-win,” such that appropriately timed pessimism has few psychological costs (Sweeny and Shepperd 2010), and this pessimism will buffer the employee from disappointment and other negative emotional reactions if the evaluation is negative and the promotion lost (Krizan and Sweeny 2013; Shepperd and McNulty 2002; Sweeny and Shepperd 2010).

Research on bracing demonstrates the benefits of pessimism in the face of uncertainty, but people can also manage their expectations by embracing hope. When embracing hope, it is possible to experience uncertainty as pleasurable (Wilson et al. 2005). In fact, the idiom “hope for the best but brace for the worst” has some empirically-supported truth. Hope and optimism are distinct (Bruininks and Malle 2005), and people tend to maintain hope for a desirable outcome even as they abandon optimism as the moment of truth approaches (Bruininks and Sweeny 2008). We suspect that the effects of hope may even have lasting consequences in the aftermath of a negative outcome. A hopeful perspective may trigger the belief that in the event that someone does not land their dream job or an eagerly anticipated promotion, something better might still come along.

8.1.4.2 Benefit-Finding

The second reappraisal strategy is benefit-finding, which involves reframing a feared outcome as more agreeable or downplaying the importance of a hoped-for outcome. By looking for the “bright side” afforded by a negative situation, people may consider the possibility that even if a worst-case outcome occurs (e.g., losing a job), they may still have something gain from it (e.g., open new doors or finding a better job). Research finds merit in the practice of benefit-finding in response to trauma (Davis et al. 1998; Janoff-Bulman and McPherson Frantz 1997). A slew of positive outcomes has been associated with benefit-finding as a means of coping with difficult health conditions, including reduced psychological distress (Davis et al. 1998), less depression and more physical activity (Littlewood et al. 2008), and greater well-being (Carver and Antoni 2004).

We speculate that although research on benefit-finding has focused on coping with difficult outcomes once they occur, anticipatory benefit-finding during periods of uncertainty may provide similarly valuable advantages. For example, employees

being considered for a promotion might ponder the various benefits of their current position (e.g., less stress, shorter hours) while they await the decision, thus reducing the sting of rejection if the promotion goes to someone else.

8.1.4.3 Invalidating Feedback

In general, people tend to be skeptical of information that contradicts their positive self-views (Gilovich 1991), and we propose that this tendency can translate into a productive strategy in times of uncertainty. In the face of negative information, people often question the validity of the information in an effort to protect themselves from its personal implications (Croyle et al. 1993; Kassarjian and Cohen 1965; Kunda 1987). For example, an employee who anticipates a possible pay cut might focus on the difficult economy as the cause rather than viewing the pay decisions as commentary on the quality of each employee. This strategy has a clear advantage in buffering self-esteem and self-efficacy in contexts of uncertainty that otherwise threaten positive self-views (Taylor 1989). The potential downfall of this strategy, however, is that effective efforts to preemptively invalidate feedback could undermine the impact of constructive feedback and thus any motivation to respond in beneficial ways. For example, employees who in anticipation of a performance evaluation becomes convinced that their superiors know little about the employees' job description and performance are unlikely to respond to a negative evaluation in a productive way.

8.1.5 Emotion Regulation

Emotion regulation, and particularly efforts to reduce anxiety or worry, is the final strategy for navigating uncertainty included in our model. Emotion regulation is a broad area of research that addresses both efforts to avoid or mitigate emotional responses before they fully arise and efforts to suppress or otherwise reduce emotional reactions that have already occurred (Gross and Thompson 2007). In the context of uncertainty, people might attempt to regulate their anxiety through distraction, avoiding reminders of the uncertainty, or simply trying to feel (or at least appear) less anxious. Even seemingly counter-productive techniques, such as denial, can be adaptive in the process of dealing with difficult circumstances by "buying time" to adjust and adapt (Radziewicz and Baile 2001). However, long-term use of certain emotion regulation strategies, most notably denial and suppression, may become harmful if they impede people's ability to take remedial action or if they take psychological resources away from other important activities (e.g., Gross and John 2003). For example, if an employee continues to ignore negative performance evaluations because they arouse too much anxiety, the employee may continue to repeat the same errors at work and therefore run the risk of losing the job altogether.

8.2 Principles for Effectively Coping with Job Insecurity

8.2.1 Moderators and Strategy Fit

Upon reviewing each of the strategies outlined in the uncertainty navigation model, it is apparent that each offers benefits and entails drawbacks to coping with job insecurity. One way to evaluate the utility of a strategy is to consider its suitability in a specific context, or for a specific type of person, a phenomenon typically referred to as “fit.” Happiness researchers have found that the success of positive interventions depends in part on the extent to which the intervention activities are well-targeted to the persons and situations of interest (Layous and Lyubomirsky 2014).

Various characteristics of uncertain situations shape how people feel about and respond to uncertainty. Drawing from the bracing literature, people are more reactive to uncertain events that are imminent (Krizan and Sweeny 2013; Shepperd et al. 1996; Sweeny and Shepperd 2007), that are personally important or consequential (Shepperd et al. 2000; Sweeny and Shepperd 2007; Taylor and Shepperd 1998; van Dijk Zeelenberg and van der Pligt 2003), and for which the possibility of failure comes readily to mind (Nussbaum et al. 2006; Sanna and Schwartz 2004; Sweeny and Shepperd 2007). Furthermore, research on health-related uncertainty finds that people experience more anxiety when they perceive their personal risk for a negative outcome is high (e.g., Honda and Neugut 2004). Other health research reveals that negative outcomes that entail permanent or uncontrollable consequences are more distressing than outcomes for which the potential for recovery or resolution is apparent (Decryuenaere et al. 2000; Rosenstock 1974; Weinstein 2000).

Although these variations in the experience of uncertainty typically have not been studied in a work context, their relevance to job insecurity is clear. Employees facing a series of lay-offs will be more anxious as they await the news to the extent that they believe they will soon learn their fate, value their current position or depend on the position for financial stability, and feel at particular risk of being on the chopping block, and to the extent that the lay-offs are a frequent topic of conversation or are otherwise salient. Similarly, subordinates awaiting performance evaluations will experience the pain of uncertainty if they believe the performance feedback is right around the corner, if the feedback is highly consequential to their job stability or growth, if they believe they are at risk of a negative evaluation, and if they face frequent reminders of the upcoming evaluation.

An understanding of the circumstances that make moments of uncertainty particularly threatening can help people enduring uncertainty to acknowledge and address their vulnerability during these moments. The previously cited research linking job insecurity to burnout and diminished job performance (Bordia et al. 2004; Cordes and Dougherty 1993; Ito and Brotheridge 2001; Lee and Ashforth 1996) suggests that responses to uncertainty can come in the form of inefficacy or failures in the professional domain. Perhaps by understanding the magnitude of distress caused by workplace or professional uncertainty, people can better direct

their attention towards productive responses to uncertainty instead of making unfavorable self-evaluations or falling victim to burnout or diminished performance.

Furthermore, certain people may be more susceptible to experiencing anxiety in times of uncertainty. Individual characteristics that seem to predispose people to experience high levels of anxiety in uncertain times include a general intolerance of uncertainty (Dugas et al. 2001) and a dispositional need for closure (Webster and Kruglanski 1994). Individual differences in how people tend to view the future can also contribute to the extent to which uncertainty feels distressing, such that dispositional optimists (Scheier et al. 1994) may be less vulnerable to the rumination and distress that accompanies fear of a negative outcome. On the other hand, dispositional and defensive pessimists (Norem and Cantor 1986; Scheier et al. 1994) may experience more anxiety in times of uncertainty. Finally, people with high self-esteem (Shepperd et al. 1996) and a tendency toward resilience (Mancini and Bonanno 2009) are buffered from the negative effects of uncertainty.

8.2.2 General Principles

Not all strategies for responding to uncertainty are equally effective, and their value in adapting to the challenges of uncertainty may not be obvious. For example, denial about the possibility of a negative outcome may at first appear to be a dysfunctional response to uncertainty; however, research supports the function of denial as an important short-term strategy to forestall the process of managing thoughts and emotions about an uncertain outcome until they feel somewhat less overwhelming (Radziewicz and Baile 2001). Of course, some strategies can be maladaptive if not applied with discretion. Moments of uncertainty are, by definition, transitory. As such, most of the strategies for responding to uncertainty are not suitable for prolonged or frequent use. For example, adopting a fixed, pessimistic view of all work-related events might inhibit job performance and job satisfaction (Stajkovic and Luthans 1998).

That said, many principles for maintaining psychological health and well-being are also relevant in responding to uncertainty. Maintaining work-life balance, practicing habits that promote happiness (Lyubomirsky 2008, 2013; Lyubomirsky et al. 2005), eating a healthy diet, getting high quality and sufficient sleep (Pilcher et al. 1997), engaging in exercise (Penedo and Dahn 2005) and applying stress management techniques (e.g., deep breathing, meditation; Chambers et al. 2009) bolster psychological resources and thus provide myriad benefits in both certain and uncertain times.

In consideration of the importance of strategy fit, people can evaluate which strategies work best for them. To some extent, the strategy toward which people naturally gravitate might be an indication of the best fit. However, when contemplating how to respond to an uncertain life event, people may be wise to consider past experiences with successful and unsuccessful uncertainty navigation. For example, people who are particularly susceptible to depression and emotional distress may

not want to overwhelm themselves with pessimistic thoughts about the future, despite the well-established benefits of bracing for the worst (Sweeny and Krizan 2013). On the other hand, people who know themselves to have a tendency toward blind, unrealistic optimism might do well to moderate their efforts to maintain hope and instead contemplate direct their efforts toward consequence mitigation.

Perhaps the key insight highlighted by the uncertainty navigation model and research on uncertainty is the importance of preparedness as a psychological state (Aspinwall and Taylor 1997; Carroll et al. 2006). Although much of psychology is dedicated to avoiding negative psychological states and garnering positive states, such as optimism and happiness, it is important to note the utility of unpleasant thoughts and emotions in stimulating action and psychological adjustment in preparation for negative outcomes (Carroll 2010). This idea echoes the conclusions drawn by Buddhist philosophers (Chodron 2008) about the importance of mindful experience and attention during transitional life stages. The optimal response to uncertainty is one that allows people to think proactively and realistically about the risk of negative or feared outcomes, without being wounded by anxiety. Vigilance over potential threats to self-esteem and self-views, perhaps via self-affirmation (Sherman and Cohen 2006) or similar techniques (Cavanaugh and Sweeny 2012), may help to buffer against the destructive effects of anxiety in times of uncertainty.

8.3 One Case of Professional Uncertainty: The Bar Exam

People's professional lives are rife with experiences of uncertainty. We have considered numerous examples of how uncertainty navigation strategies might be played out in such contexts, including applying to jobs, losing a job, concern over job retention, performance evaluations, and promotions. We now turn to a detailed illustration of professional uncertainty by describing the broad findings from a recent study of people awaiting the results of the California bar exam (Sweeny and Andrews 2013). The bar exam represents a challenging and momentous transition from one phase of an occupational career (graduate career in law school) to the next phase (becoming a licensed attorney). Across the 4-month waiting period, participants in our study reported high but fluctuating levels of anxiety and rumination, as well as fluctuating expectations, efforts to brace and maintain hope, perceptions of benefits and the validity of the bar exam as personally relevant feedback, and efforts toward consequence mitigation. With a few exceptions, the experience of uncertainty seemed to be particularly poignant for people at two points: immediately following the exam and immediately prior to feedback. It may be encouraging to note that despite the exceptionally high stakes of this particular professional uncertainty, participants eventually "settled in" during the waiting period, such that they reported relatively low levels of anxiety and rumination and relative optimism during the middle of the waiting period before becoming more agitated as their feedback approached.

In addition to closed-ended measures of anxiety, rumination, and use of uncertainty navigation strategies, participants in our study also provided open-ended descriptions about their efforts to cope with the waiting, and these responses paint a vivid picture of the experience of one type of professional uncertainty. At several points throughout the waiting period participants were asked whether they had “done anything in the last three days to try to minimize the problems that would occur if [they failed] the bar exam,” and if so, to provide examples of their efforts. Some participants reported clear examples of objective consequence mitigation. For example, one participant said that he spent time “[looking] at alternative careers,” and another reported going on job interviews. Several participants reported “[thinking] about moving to another state” (presumably with an easier exam, as California’s has one of the lowest pass rates), and one participant even “looked at application deadlines and prices for other states’ bar exams.” Perhaps the best example of objective consequence mitigation came from a participant who decided to “focus on doing better at [his] second job which does not require [him] to pass the bar.” In all cases, these efforts have the clear potential to mitigate objective problems that might arise in the case of a failed exam.

In addition to objective consequence mitigation, the responses of some participants reflected efforts at psychological consequence mitigation. For example, one participant engaged in both public and private attempts to emotionally prepare for failure by “[telling] people [he] might fail and [thinking] about the possibility.” Another socially-oriented participant reported “[acting] apprehensive/nervous about the bar in front of coworkers,” presumably in an effort to mitigate embarrassment and ease her coping efforts in the case of failure, and yet another participant “began thinking about what [she] would tell people at work.” Some participants also enlisted friends and family to help them cope when the time came, for example by “[requesting] that friends and family not expect [him] to give them [his] bar results immediately.”

Finally, participants’ responses also indicated efforts toward emotion regulation, particularly at the moment of truth, when they would find out whether they passed or failed within hours. Some participants clearly described distraction efforts (e.g., “overbook myself, make sure I have plans all day to keep myself occupied,”), others pursued healthy behaviors to keep their psychological resources replenished (“studying, sleeping regularly, and doing yoga when I could”), others turned to social support (“I’ve been social, I had a Thanksgiving dinner with friends last night”), and others engaged in suppression (“tried not to think about it”). Several participants reported turning to prayer or fasting as a means of emotion regulation in the final hours of uncertainty, whereas one participant simply responded with “DRINK.” Lastly, one participant provided a clear example of a type of benefit finding by telling herself she “can just take it again,” which presumably served to downplay her sense of dread about the feared outcome.

The responses of our participants in this study of professional uncertainty reveal several key points about coping with difficult waiting periods and uncertain outcomes. First, at least some of our participants seemed to have an intuitive sense of the effectiveness of the uncertainty navigation strategies identified in our model and by other researchers. Second, participants used a variety of uncertainty navigation

strategies, and these strategies shifted away from objective consequence mitigation and toward emotion regulation and psychological mitigation as feedback approached. Finally, these responses emphasize the importance of choosing one's own best strategies for managing uncertainty, whether through social activities, yoga, religious practices, or intoxication. These strategies may not be equally effective, and some (e.g., intoxication) may have ancillary consequences. However, our findings suggest that people have a wide array of strategies available to them that may be valid for some people under some circumstances.

8.4 Discussion and Recommendations

Aphorisms abound regarding the difficulty of dealing with the ubiquitous and frequent experience of uncertainty. In this chapter, we outline numerous strategies for coping with and responding to job insecurity and discuss the benefits and disadvantages of each. Although we cannot provide one universal prescription for how to best navigate uncertainty, one take-home message emerges from the research that serves as the basis for the uncertainty navigation model. That is, the anxiety associated with uncertainty serves the adaptive purpose of propelling people to plan ahead and take action to avoid being caught off-guard by negative outcomes. The function of this anxiety can be compared to the function of physiological symptoms as cues to attend to threats to physical health. As such, we recommend that people avoid simply numbing themselves during the potentially painful process of experiencing uncertainty. Instead we recommend that people pay attention to these cues and respond by making an effort to prepare for potentially negative outcomes. In determining how best to respond to uncertainty, people must consider which actions are best suited for their own professional lives, developing a customized “map” for navigating uncertainty.

In essence, people can plan ahead to the best of their ability, but also plan somewhat loosely. We do not endorse rumination or fixation on worst-case scenarios, but a dose of bracing paired with the maintenance of hope might be beneficial. A mindful and attentive approach to uncertainty allows people to embrace a realistic view of potential risks to their work-related well-being. Thus, navigating uncertainty and issues of job insecurity requires people to toggle nimbly between a future-oriented perspective of preparedness and a present-oriented perspective to maintain a sense of work-related efficacy and professional self-worth.

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Chapter 9

Flexicurity, Job Insecurity, and Well-Being in European Labor Markets

Tomas Berglund

9.1 Introduction

European labor markets have since the 1980s often been described as “sclerotic” by critics who believe that these economies are stagnating in comparison to important global competitors. The labor markets in Europe are seen as too rigid because of the extensive social protection which could hamper necessary flexibility in a global economy where both job destruction and job creation are accelerating (Sapir 2006). Job protection is said to slow down employers’ adaptation to market changes, and generous unemployment benefits are believed to make the unemployed more choosy, thus prolonging their time in unemployment and increasing minimum wages. Unemployment rates therefore reach a higher level compared to less regulated labor markets, such as the United States.

However, not everyone agrees on this negative description of European labor markets. Generous welfare states and regulated labor markets have also been a great success in reducing poverty, equalizing living conditions, and humanizing working life. Nonetheless, Europe is not a homogenous region and there are great variations among countries on many important indicators, for example, GDP per capita or unemployment rate. Northern Europe, and more specifically the Scandinavian countries, is usually ahead on these. Other European countries, especially in Eastern Europe, fare worse.

During the past decade, there has been a rather intensive debate as to whether social protection necessarily contradicts flexibility in the labor market and the economy. Or, the other way around, is flexibility always something that destroys social security? At the centre of this debate is the proposal of “flexicurity”, a concept combining the words flexibility and security (Wilthagen and Tros 2004). It was first used in the Netherlands in the mid-1990s in a discussion of the necessity to flexibil-

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ize the labor market by reducing job protection for permanent employees and at the same time improve the protection of temporary workers (Wilthagen 1998). Later in the nineties, it was also used to describe the institutional characteristics of the labor market in Denmark, where a whole flexicurity system has been established (Jørgensen and Madsen 2007). Its main features are very liberal employment protection legislation, combined with generous unemployment benefits and extensive use of active measures for the unemployed (e.g., training, subsidized jobs). In 2007, the European Commission also drew attention to the concept and in a so-called Communication recommended the member states pay attention to principles of flexicurity (European Commission 2007).

A main message of flexicurity proponents is that job protection should be replaced by employment security. In this regard, one should not create policies that secure particular jobs, but instead facilitate the creation of new jobs and transitions of the labor force to them. The labor force should in this way still enjoy the security of staying employed, but not necessarily in the same jobs. Paradoxically, a flexicurity system could therefore result in higher levels of job insecurity for employees. However, the negative effects of job insecurity should be mitigated by generous unemployment insurance (UI) and extensive use of active labor market measures, besides a flourishing economy in general where new jobs are available.

This chapter will focus on the central aspect of job insecurity and its relationship to well-being. The question we will try to answer is whether the labor market institutions emphasized in the flexicurity discourse have significance in mitigating job insecurity and its presumed negative effects on well-being. In our research, we used a cross-European data set – the European Working Conditions Survey – and an analytic strategy called multilevel regression analysis. In this way, the impact of factors belonging to the individual level and the contextual level can be differentiated.

In particular, national institutional factors related to employment protection legislation, unemployment insurance, and active labor market policies, beside the general state of the economy indicated by unemployment level, occupy the centre of attention in this chapter. In the next sections, we will discuss some of the theoretical issues concerning job insecurity, well-being, and labor market institutions, then present our research data, methods, and results. The chapter will end with a discussion of the relevance of labor market institutions to mitigate the problems of job insecurity and related ill health. Does flexicurity show promise in this regard?

9.1.1 Job Insecurity and Well-Being

In modern societies, paid work is the most important factor behind the capacity of individuals to fend for themselves and their households. Other income sources can in some circumstances replace a wage or salary: for example, support from family and friends, savings, income from capital, or benefits from the welfare state. However, these sources are often of limited duration. Furthermore, a job is more than just the manifest function of generating economic means; a job also creates a

sense of meaningfulness and social belonging. These are examples of what Marie Jahoda (1982) calls a job's latent functions.

Job insecurity has to do with the risk of losing the job, and as mentioned, it is a threat with potential serious consequences for employees. The policy idea of flexicurity – to increase job insecurity (decrease job protection) and facilitate transitions between jobs – may thus, from an employee perspective, look like a rather risky endeavor.

The concept of job insecurity has several meanings in social science. Usually, a first distinction is made between objective and subjective job insecurity (De Witte 2005; Sverke et al. 2002). The first has to do with the objective risk of a job loss, for example, because of the temporary character of a job contract or lay-off decisions in an organization. Subjective job insecurity, on the other hand, is the employee's perception of the risk of losing the job. This subjective perception does not need to be a correct assessment of the situation. It may be a judgment made on the basis of wrong information or colored by a feeling of being at risk. However, an employee's assessment of the risk has been shown to have a rather strong relationship to the objective risk of losing the job (Dickerson and Green 2012).

It is also possible to separate between different aspects of the concept of subjective job insecurity. Some researchers distinguish between cognitive and affective job insecurity (Anderson and Pontusson 2007; Borg and Elizur 1992; Huang et al. 2010). The cognitive refers to individuals' assessment of the risk of losing the job and the affective to emotional reactions to the perceived risk, where worries are a typical response. This distinction makes it possible to understand that perceived risks of a job loss are not always accompanied with fears or worries. Or, conversely, that worries of a job loss are not always combined with a direct perceived threat.

However, other researchers regard these aspects as more intermingled and emphasize that individuals' judgments are colored by subjective factors of how the situation is perceived (De Witte 2005). One essential factor in this regard is whether they have any means to handle the particular situation or whether they are only victims of the circumstances. Greenhalgh and Rosenblatt (1984) stress that the ability to cope with a threatening situation is related to the emotional reaction to it: If we perceive a threat and find no means to handle it, our worries will be intensified.

One factor that can enable workers to cope with job insecurity is if job alternatives exist in the external labor market (De Cuyper et al. 2008). In the flexicurity paradigm, this is referred to as employment security. For example, Berglund et al. (2014) show that the assessment of good possibilities to find an equal or better job in the labor market reduces worries of losing the present job (affective job insecurity). Furthermore, the strong connection between an employee's assessment of the risk of losing the job (cognitive job insecurity) and worries connected to a job loss is reduced when the employee sees opportunities in the external labor market.

What effects are attributed to job insecurity? Research shows that job insecurity is related to phenomena such as organizational commitment, turnover intention, and job dissatisfaction (Sverke et al. 2002; Cheng and Chan 2008). Of central importance in the present context is that job insecurity is also related to health and well-being. One explanation for this is that job insecurity works as a serious stressor

in (working) life (De Witte 2005; Vulkan 2012). Job insecurity implies a threat to a sustainable life situation by the potential loss of the manifest and latent functions of a job (Jahoda 1982). This threat may be more severe if the employee has limited or no means to cope with the situation.

The core question in the present study is whether the institutional context of a country, that is, the rights and resources that residents are entitled to and which are provided by national authorities, can also serve as a means to cope with the expected adverse effects of job insecurity on well-being.

9.1.2 Labor Market Institutions

In the literature of flexicurity, and in particular in the description of the flexicurity system of the Danish labor market, the metaphor of a “Golden Triangle” has been used (OECD 2004: 97–98; Bredgaard et al. 2005). The three corners of the triangle represent the central pillars of the system. One corner represents the very flexible character of the labor market with liberal employment protection legislation. Employers therefore have very few obstacles when it comes to layoffs. This creates numerical flexibility which results in high mobility flows to and fro employment (Berglund et al. 2010).

The second corner represents the social protection that the welfare state provides. Especially emphasized is the generous UI policy in Denmark. In the mid-2000s, it compensated up to 90 % of the previous wage (although with a ceiling), with a duration up to 4 years (Berglund et al. 2010: 239ff.). An important side effect of the generous UI is that it made employees and unions in Denmark more ready to accept a low level of job protection in the labor market (Bredgaard et al. 2005: 24ff).

The third corner in the triangle represents investment in active labor market policies. These measures have the purpose of reducing the negative impact of unemployment by activating the unemployed in their job search efforts and adapting the human capital of the unemployed to the demand in the labor market by providing vocational training. However, active labor market policies were a rather late piece in the Danish arsenal to combat unemployment (Lindvall 2010: 153ff). They were introduced in the beginning of the 1990s and were essential in the efforts to bring down the high level of unemployment at that time.

In summary, the Danish flexicurity system implies high levels of mobility in the labor market and in this regard a high level of objective job insecurity. However, for employees this insecurity is compensated for by generous unemployment benefits and active measures that help unemployed back to work. From a theoretical point of view, these compensating institutions may reduce the negative impact of job insecurity, for example, on well-being. In this chapter, we will test whether these are reasonable expectations by relating different countries’ relevant institutional characteristics to subjective job insecurity and well-being. The analysis in the following three sections will focus on 26 European countries, as we describe the variations across the countries with regard to these institutions.

9.1.2.1 Employment Protection Legislation

As an indication of how employment protection legislation (EPL) differs among the countries, we use the OECD indices on the strictness of EPL. The index is a summation of three different features of the legislation (Venn 2009). The first feature indicates which rules have to be taken into account when employees with permanent (no time limit) contracts are fired. Relevant examples are rules about notice periods or special grounds for dismissal. The second feature concerns rules in the case of collective layoffs, for example, if the public employment office has to be given notice. The third feature is a focus on the rules regarding temporary contracts, for example, in which types of work these are allowed and what is the maximum duration. These aspects of EPL have been weighted and combined by OECD into one overall indicator (Fig. 9.1).

The indices in Fig. 9.1 range between 0 and 6, where higher numbers indicate stricter legislation. The figure shows a rather large variation in protection among the countries. At the low end are the UK and Ireland with liberal legislation. If we had included more OECD countries, we would have found the US with the lowest index (0.65) together with other Anglo-American countries. In the European context, Denmark has a relatively liberal legislation – in line with the flexicurity expectation. Strict legislation is found in many Mediterranean countries such as Spain and Portugal, and the strictest legislation among the presented countries is that of Luxemburg.

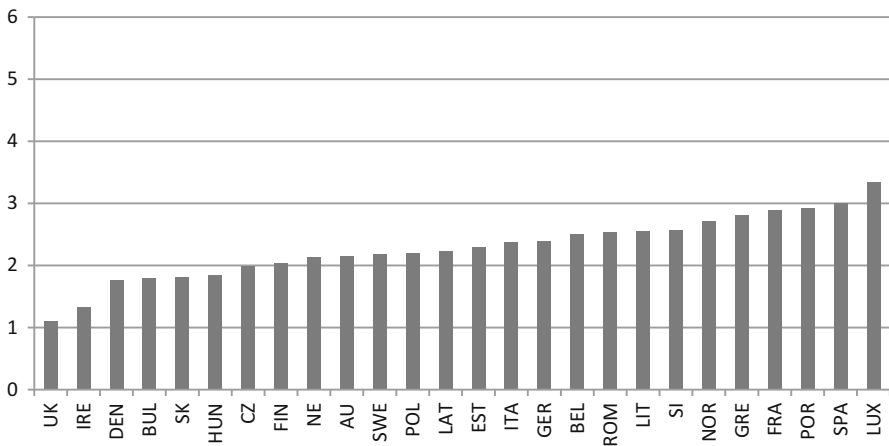


Fig. 9.1 Employment protection legislation, 2008. Overall strictness. OECD Version 2 (Main source: OECD (2010), “Employment Protection Legislation: Strictness of employment protection legislation: overall”, *OECD Employment and Labour Market Statistics* (database). doi: [10.1787/data-00317-en](https://doi.org/10.1787/data-00317-en) (Accessed 14 March 2013). For Bulgaria, Latvia, Lithuania, and Romania, the source is Sabina Avdagic, Causes and Consequences of National Variation In Employment Protection Legislation In Central And Eastern Europe, ESRC project RES-061-25-0354)

9.1.2.2 Passive Labor Market Policies

The use of unemployment benefits and other measures to reduce the economic consequences of unemployment also varies among countries, and the construction of the UI has great consequences for the generosity of the benefits. The rules can vary with respect to eligibility, on the compensation rate, and how long one can continue to receive the benefit. In the present context, a rather crude indicator will be used. It is the expenditure on passive labor market policies (PLMPs) as percentage of GDP. However, PLMPs also include costs for early retirement for labor market reasons, beside the costs of unemployment insurance. In some countries (Belgium, Poland, and Slovakia) early retirement constitutes a substantial share of the passive measures, but not in most of the countries, although Denmark has a rather high figure (23 % of the costs of passive measures in 2010).

Figure 9.2 shows the expenditure on passive measures as percentage of GDP for 2010. The highest proportions of expenditure are found in Spain and Ireland, two countries that were hit very hard by the financial and Euro crises. Greece is another of the countries in crisis, although with much lower spending on passive measures. Denmark, together with the other flexicurity country, the Netherlands, is found in the upper end of the diagram. At the low end are the UK, Poland, and the Czech Republic. Sweden, a country historically known for its generous social spending, is also found towards the lower end, to a large extent because of changes and cuts in its UI in 2007 (Bengtsson and Berglund 2012).

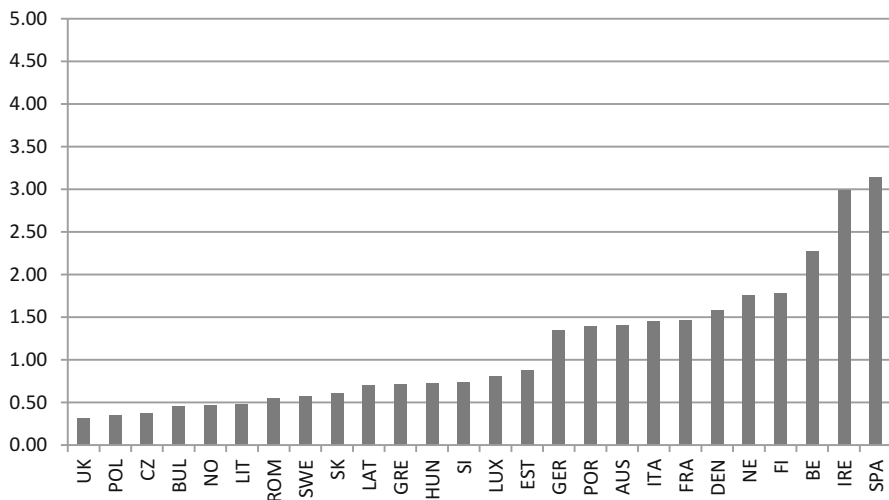


Fig. 9.2 Passive labor market policies as percentage of GDP, 2010 (Source: Eurostat databases)

9.1.2.3 Active Labor Market Policies

Active labor market policies (ALMPs) refer to measures that activate the unemployed during their unemployment spell. Some measures are intended to stimulate job search efforts, others to improve or change the human capital of unemployed persons by vocational training. Sometimes the measures directly create or subsidize jobs for the unemployed. In the present analysis, we use an overall indicator of ALMPs, which, as previously, refers to expenditures on ALMPs as percentage of GDP.

Figure 9.3 shows that Denmark and Belgium are the countries with the highest percentage spending on ALMPs. However, two other Nordic countries, Finland and Sweden, are also found at the top. In many ways, ALMPs can be said to be a Nordic invention; in Sweden, they were already in use in the late 1950s to facilitate the restructuring of the economy (Bonoli 2010). It was not until the 1990s that ALMPs became more widespread in Europe. In some countries the political will to use ALMPs is more modest. This is the case for many Eastern European countries as well as the UK.

9.1.3 Expected Significance of Labor Market Institutions for Job Insecurity and Well-Being

Let us now return to the question of the significance of these institutions – EPL, PLMPs, and ALMPs – for employees’ perceptions of job insecurity and well-being. Which expectations would be reasonable with regard to how they might affect employees?

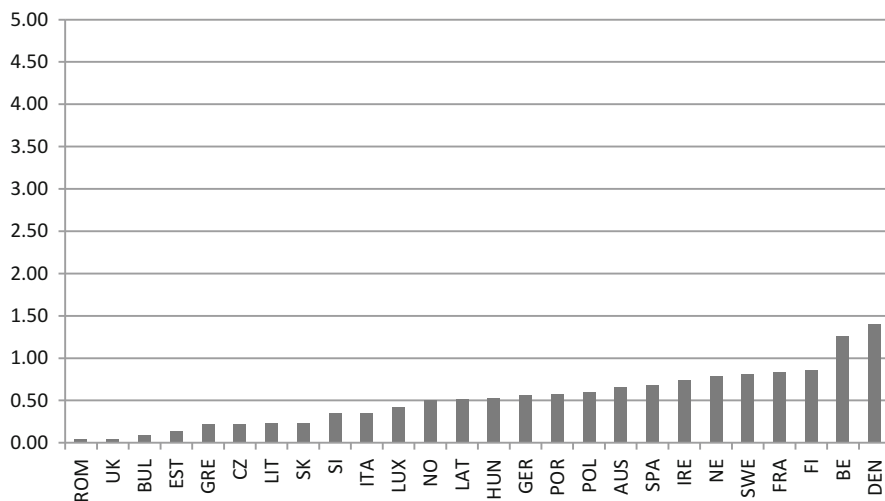


Fig. 9.3 Active labor market policies as percentage of GDP, 2010 (Source: Eurostat databases)

A starting point is to turn to institutional theories and their perspectives on how institutions affect actors. Institutions are usually defined as “the rules of the game,” the formal or informal rules that constrain and make social interaction more predictable (Hall and Soskice 2001: 9; North 1991). Actors are believed to develop cognitions, norms, and evaluations in relation to institutions. They often have knowledge about how the institutional rules are working and develop normative expectations of appropriate behavior in relation to them. Furthermore, institutions can be contested by the actors; that is, do they serve the actors in the pursuit of valued goals?

The institutional perspective gives a rationale to believe that the institutional order in different countries may affect individuals’ assessments and affective responses to their situation in the labor market. For example, the existence of employment protection legislation may influence how one assesses the risk of losing a job. For example, in the Swedish legislation there is a well-known rule of “last in, first out” when collective layoffs take place. This should make seniority an important factor behind the assessment of the risk – which is actually the case (Berglund et al. 2014). However, what does the research say about the effects of EPL, PLMPs, and ALMPs on actors, and in particular, employees?

Employment protection legislation has long been a subject of discussion, especially the consequences of EPL for employers’ firing and hiring decisions (Skedinger 2008; OECD 2010). The general view among researchers is that strict EPL slows down both hiring and firing, with the consequence that those already employed are relatively protected but the unemployed have difficulty getting new employment. However, if temporary employment is allowed, it can work as an alternative way for employers to obtain flexibility and lead to a greater use of these contracts. A possible consequence is therefore a dualization of the labor market with relatively protected jobs in a core, but higher levels of job insecurity in the periphery of employees with temporary contracts.

Following this reasoning, several consequences of EPL are expected in relation to subjective job insecurity, and ultimately to well-being. Firstly, the strictness of EPL is expected to correlate negatively with subjective job insecurity; that is, the higher the protection, the less perceived job insecurity. Secondly, EPL and employment contracts may interact, implying higher levels of job insecurity among temporaries in labor markets with strict EPL than in markets with more liberal legislation. A third potential effect is related to the significance of employment security (the security of having job options in the labor market). Following the flexicurity formula, employment security becomes more important to reduce job insecurity in labor markets with liberal EPL than in labor markets with stricter EPL.

The generosity of passive measures, especially UI, may also be important for job insecurity and well-being. Generally, UI is believed to have significance for the unemployed in that generosity can prolong the unemployment spell (Layard et al. 1991; OECD 2010). However, there are researchers that believe that UI affects the employed as well. Sjöberg (2010) argues that the UI works as any other insurance and reduces feelings of economic vulnerability in case of a job loss. Following this reasoning, it is possible that the generosity of passive measures (PLMPs) reduces subjective job insecurity. Furthermore, job insecurity and generosity of PLMPs may

also interact in that the negative impact of job insecurity on well-being becomes less strong, the higher the spending on PLMPs.

When it comes to active labor market policies (ALMPs), it is much harder to predict any conclusive relationships that it can imply for employees. In the flexicurity literature, ALMPs are believed to affect the behavior of the unemployed (Bredgaard et al. 2005). On the one hand, a motivation effect increases the search effort of unemployed persons because the measures they are assigned to during the unemployment spell are not perceived as so positive and a new job can be a way to escape those measures. On the other hand, the measures can improve (or decrease the erosion of) the human capital of the unemployed by vocational training. In the present context, however, governmental spending on ALMPs may also work as a signal to employees that efforts are going to be made by the state to reduce the negative effects of unemployment. This may also reduce feelings of job insecurity and improve well-being.

Is there any support for these expectations in previous research? Anderson and Pontuson (2007) find a clear negative relationship between the strictness of EPL and job insecurity, while Erlinghagen (2008) cannot confirm this relationship and Sjöberg (2010) does not find any relationship between EPL and well-being either. However, Chung and Van Oorschot (2011) show that EPL and employment contracts interact in relation to job insecurity in an unexpected way, indicating a smaller impact of the employment contract (permanent or temporary) on job insecurity when EPL is stricter.

Anderson and Pontuson (2007) also find that the generosity of UI reduces the worries of losing a job. However, the same significance is not found for ALMPs. Sjöberg (2010) finds a significant impact of the generosity of UI on subjective well-being. He also discovers that the generosity of the UI and unemployment experiences among employees interact, showing less significance of unemployment experience on well-being in countries with a more generous UI.

Erlinghagen (2008) do not find any relationship between social spending (which includes the UI) and job insecurity. The only higher-level relationship that is found is to the long-term unemployment rate (the higher the rate of unemployment, the greater the risk of job insecurity). Similar results are shown in Esser and Olsen (2012), who reveal a significant relationship between job insecurity and the unemployment rate. Chung and Van Oorschot (2011) only find weak support for the significance of labor market policies when the impact of economic conditions are controlled for (employment rate and GDP growth rate).

This brief overview thus shows mixed results concerning the significance of the labor market institutions pointed out as vital for the flexicurity formula. No straightforward answer is given to the question whether employment protection legislation decreases job insecurity or spending on active and passive measures can compensate for reduced security. However, less ambiguous are results showing that unemployment increases insecurity in the labor market. Consequently, this is an important factor to consider when evaluating the significance of labor market institutions. We now turn to our own analysis of these matters.

9.2 Method

The data used in this chapter are from the European Working Conditions Survey 2010 (EWCS 2010) administered by Eurofound, Dublin.¹ Data were collected in 34 European countries, although in the following analyses only 26 countries are included (Norway and “EU 27” except Cyprus and Malta). The restriction of countries is due to missing data on the national level for some of the indicators. The general purpose of the survey is to provide data on working conditions; it uses random sampling of persons above 15 years residing in the country and employed in the reference week. Achieved sample sizes vary between 1,000 and 4,001 (Eurofound 2010).

In the present study, we used multilevel regression methods. These methods are appropriate when data are nested and exist on different levels (Hox 2002). In this case two levels are considered. The first is the individual level, which measures characteristics of the individual. The second level is country, which constitutes the context for individuals, that is, individuals are nested within countries. In the following analyses, we expected that variations in national contexts, for example, regarding the strictness of employment protection legislation, could affect the inhabitants’ perceptions of their job insecurity and well-being.

9.2.1 Dependent Variables: Job Insecurity and Well-Being

Job insecurity was measured by responses to the following statement in EWCS: *I might lose my job in the next 6 months*. The respondent had five options, from “strongly agree” to “strongly disagree.” In terms of the foregoing theoretical discussion, this indicator may in the first instance be regarded as a measure of cognitive job insecurity (Berglund et al. 2014). However, we were not able to control for the affective element of job insecurity, which makes it most safe to look at as an indicator of subjective job insecurity, including both cognitive and affective elements.

As mentioned, the second dependent variable of interest is well-being. In the EWCS questionnaire, the WHO-5 Well-Being Index developed by the World Health Organization is used to measure mental well-being (McDowell 2010). Five statements are given about the respondents’ mood: if they are cheerful and in good spirits, feel calm and relaxed, etc. There are six response alternatives which range from “All of the time” to “At no time”. The items are summated into a scale ranging between 0 and 25 ($\alpha=0.88$).

¹For more information: <http://eurofound.europa.eu/ewco/surveys/>

9.2.2 *Independent Variables*

Following the logic of multilevel analysis, independent variables on both individual and country level were used. On the individual level, variables present in the questionnaire and known from previous research to be related to job insecurity or well-being were considered for the models (Berglund et al. 2014; Erlinghagen 2008; Näswall and De Witte 2003; Vulkan 2012). In the end, however, only ten variables with statistically significant relationships were kept in the final regression models.

Beside standard variables such as gender, age, contract (permanent vs. temporary), sector (private vs. public), and occupational group, the individual-level model analyzing job insecurity includes indicators of influence and social support in the work situation. Furthermore, a variable measuring economic hardship is included, indicated by the question: *Thinking of your household's total monthly income, is your household able to make ends meet?* Six answering alternatives are provided, ranging from “Very easily” to “With great difficulty.” An index measuring somatic complaints is used, measuring backache, muscular pains in shoulders, neck and/or upper limbs, and muscular pains in lower limbs ($\alpha=0.72$). The last variable in the model measures employment security by the question: *If I were to lose or quit my current job, it would be easy for me to find a job of similar salary.* The respondent could agree or disagree, on a five-point scale.

Concerning well-being, almost the same model is used except for some changes. First, neither employment contract nor sector showed any significant relationships to well-being and were therefore excluded from the analysis. Secondly, two new variables were introduced. The first measuring work–life balance: *In general, do your working hours fit in with your family or social commitments outside work very well, well, not very well, or not at all well?* The second question asks about demands in the work situation: *Over the last 12 months how often has it happened to you that you have worked in your free time in order to meet work demands?* The respondent could answer whether that happened nearly every day, once or twice a week, once or twice a month, less often, or never. A third change is that the variable measuring job insecurity also is included in the analysis.

The second level in the analysis includes variables indicating contextual characteristics of the countries. The first is employment protection legislation: the OECD summated index that is used as an indicator (see note 1). The second and third variables are the expenditures on passive or active labor market policies as percentage of GDP (Source: Eurostat, see above). Beside these theoretically central variables, unemployment level in 2010 is also included to control for the situation in the national labor markets (Eurostat data). This is especially important when it comes to the spending on PLMPs and ALMPs. The size of the spending is obviously related to the unemployment level and is therefore necessary to control for in the models. Beside unemployment level, GDP per capita have also been tested, although without showing any significant effect on either job insecurity or well-being. The variable is therefore left out of the models.

9.3 Results

The following analyses focus on the variation in job insecurity and well-being in 26 European countries. Figures 9.4 and 9.5 show the mean values of these variables. A first observation is that the variation among countries seems greater for job insecurity than for well-being. Countries with high levels of job insecurity are often found in Eastern Europe. Norway and Denmark have the lowest levels; for well-being, the same two countries are top scorers, together with Ireland, while many Eastern European countries exhibit the lowest levels.

9.3.1 Individual-Level Factors

Proceeding with the regression analysis, Table 9.1 shows a null model and an individual level (Model 1) without country-level variables present. Focusing first on job insecurity and the impact of the independent variables in Model 1, we find several expected relationships. The most important factors are temporary employment and economic hardship. Both have rather large positive impact on subjective job insecurity (increasing insecurity). Other factors to notice are that both influence and social support in the work situation reduce job insecurity. Furthermore, employment security, that is, perceived good opportunities in the labor market, reduces job insecurity.

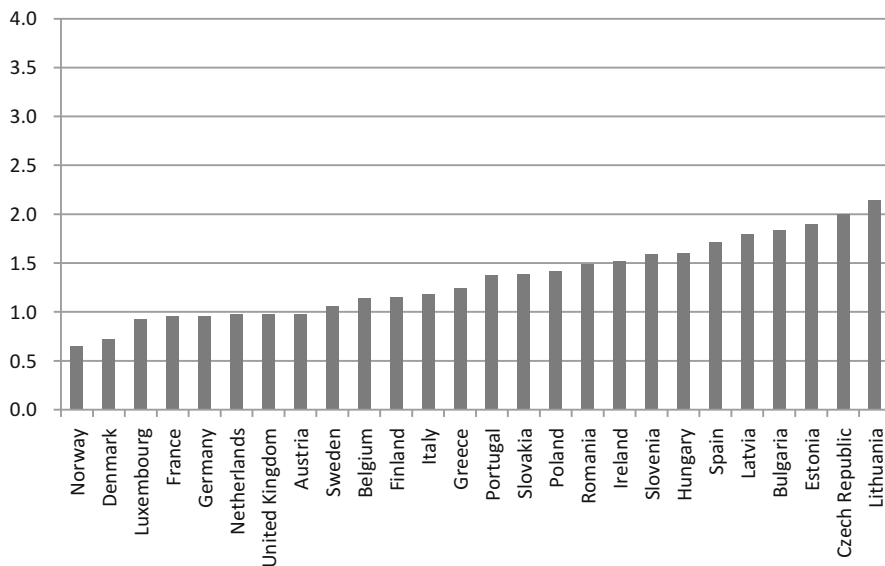


Fig. 9.4 Job insecurity: mean values on a 0–4 scale (Source: EWCS)

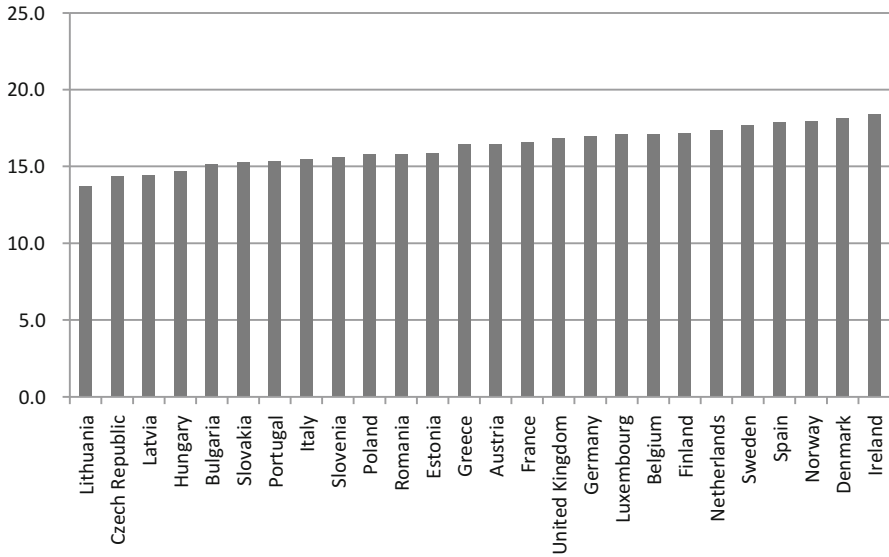


Fig. 9.5 Well-being: mean values on a 0–25 scale (Source: EWCS)

Table 9.1 Job insecurity and well-being: individual-level predictors

	Dependent: job insecurity		Dependent: well-being	
	Null model	Model 1	Null model	Model 1
Individual level:				
Job insecurity (0–4)				–0.273***
Employment security (0–4)		–0.063***		0.187**
Gender (Male = 0)		–0.057***		–0.423***
Age category (55- ref)				
–24		0.193***		0.659**
25–34		0.219***		0.299+
35–44		0.162***		0.081
45–54		0.158***		–0.121
Temporary contract (Permanent=0)		0.689***		
Public sector (Private=0)		–0.296***		
Occupational category (Manual workers ref)				
Managers		0.005		–0.874***
Professionals		–0.127***		–0.907***
Semiprofessionals		–0.096***		–0.717***
Service workers		–0.040+		–0.247**
Work–life balance (0–3)				0.730***
Work demands (0–4)				–0.178***

(continued)

Table 9.1 (continued)

	Dependent: job insecurity		Dependent: well-being	
	Null model	Model 1	Null model	Model 1
Influence (0–4)		–0.084***		0.293***
Social support (0–8)		–0.046***		0.444***
Economic hardship (0–5)		0.140***		–0.671***
Somatic complaints (0–3)		0.052***		–0.840***
Intercept	0.072	–0.046	–0.085	0.467
Variance:				
Individual level	1.390	1.158	24.378	19.504
Country level	0.177	0.109	1.374	0.320
ICC	0.113		0.053	
-2LL	72,110.379	68,212.780	135,676.692	13,0931.749
Reduction -2LL		3,888.768***		4,744.943***
n:				
Individual level	22,731		22,478	
Country level	26		26	

Unstandardized coefficients. Mixed-effect multilevel regression with maximum likelihood estimation

Levels of significance: + $p < 0.10$; ** $p < 0.01$; *** $p < 0.001$

Due to the large numbers in the analysis ($n = 22,731$), there are also many more or less trivial significant results, for example, the effect of gender. However, before concluding that these factors are trivial in explaining job insecurity, one has to consider that there are also national variations in the size of the coefficients. In some countries, therefore, the impact may be stronger and in others weaker or even going in an opposite direction. In the present analysis, only the coefficients of gender, occupational group, and somatic complaints do not show any statistically significant country variation. This means that the other coefficients can be both stronger and weaker in the different countries. What is shown, therefore, is an average (fixed) effect of the variables in the population of countries.

The null model decomposes the total variance of the dependent variable into individual-level and country-level variance (Hox 2002: 15). This makes it possible to estimate how much of the total variance is related to the country level – approximately 11 % in the present case. However, some of this variance may be due to how the samples are composed in different countries, for example, how frequent temporary contracts are. This may affect the general level of insecurity in a country. Model 1 controls for many of such effects; about 38 % of the country-level variance is explained by the insertion of individual-level variables.

Focusing on the other dependent variable, well-being (Table 9.1), Model 1 indicates the importance of several individual-level variables. The strongest impact is found for the variables social support and economic hardship. The first variable is related to an increase in well-being and the other to a decrease of it. Other important variables are somatic complaints (reducing well-being) and work–life balance

(increasing well-being). Furthermore, both influence in the work situation and work demands have impact in expected directions. Occupational category is also an important variable, although less expected. Managers and professional categories have considerably lower well-being than manual workers. There are also small effects of gender and age.

Both job insecurity and employment security have an impact on well-being in expected directions. Job insecurity decreases well-being while employment security works in the other direction. This means that if an employee finds opportunities in the labor market, the negative effects of job insecurity on well-being may be reduced. It is important to emphasize that this model includes many important factors behind well-being, for example, the somatic status of the respondent. The variables measuring security and insecurity, therefore, withstand a rather hard test and still show unique effects on well-being.

As for variation in coefficients among countries, only gender and occupational category do not display significant country-level variance. In general, however, less variation in well-being (5 %) is due to differences among countries compared to the previous analysis (see null model). Furthermore, much of this variation is a compositional effect – approximately 77 % is explained by the individual-level variables controlled for in Model 1. This implies that there is not much variance left to explain by country-level variables. However, one has to consider that the countries studied here are rather affluent in a global perspective, and more country-level variation would most certainly appear if less rich countries had been included.

9.3.2 *Country-Level Factors*

We now turn to the significance of the country-level variables – the strictness of employment protection legislation (EPL), the investments in passive and active labor market policies, and the general unemployment level in the countries. Table 9.2 shows the results for both job insecurity and well-being. Focusing first on job insecurity, Model 2 shows the impact of each of the variables separately but with control for the individual-level variables. Both unemployment level and investments in ALMPs are statistically significant and related to an increase respectively a decrease to the level of job insecurity in the country. For example, if the unemployment level increases five percentage points, the predicted rise in general perceptions of job insecurity (the country-level intercept in the analysis) will be 0.22 on a 0–4 scale.

In Models 3 and 4, the country-level variables are analyzed together within the same model. However, PLMPs and ALMPs are analyzed separately because of very high internal correlation. In Model 3, PLMPs are statistically significant beside the unemployment rate. It implies a reduced level of job insecurity with increased expenditures of PLMPs. This relationship, however, only appears under control of the unemployment rate, which can be explained by a correlation between unemployment level and spending on PLMPs. When this correlation is controlled for, a unique effect of PLMPs appears which probably has to do with the generosity of the

Table 9.2 Job insecurity and well-being: country-level predictors

	Dependent: job insecurity		Dependent: well-being	
	Model 2	Model 3	Model 2	Model 3
Country level:				
Unemployment rate	0.044**	0.048**	0.025	0.011
EPL	-0.063	-0.056	0.365	0.309
PLMP	-0.104	-0.152*	0.505**	0.476**
ALMP	-0.463*		0.612+	0.665*
Variance:				
Individual level		1.158		19.505
Country level		0.056		0.140
-2LL		68,196.154		130,916,895
Reduction -2LL		16,626***		14,854**
n:				
Individual level	22,731		22,478	
Country level	26		26	

Unstandardized coefficients, control for individual-level variables in Model 1. Mixed-effect multilevel regression with maximum likelihood estimation

Levels of significance: +p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001

benefits. The significance of ALMPs still remains in Model 4, indicating that investment in ALMPs is also related to decreased levels of job insecurity.

Focusing on well-being, statistically significant relationships are found to both PLMPs and ALMPs, but not to EPL and the unemployment rate. And both coefficients go in the same direction: spending on labor market policies are related to increased levels of well-being in the countries.

9.3.3 Cross-Level Interactions

The last step of the analysis is to check whether any of the country-level variables affect the impact of individual-level variables on job insecurity and well-being (so-called cross-level interactions). Following the theoretical considerations, three variables on the individual level are in focus: employment security, employment contract, and job insecurity – the last variable only in relation to well-being. The results are presented in Table 9.3.

Focusing on job insecurity, interactions were found for two of the institutional variables. Model 5 shows the interaction between employment protection legislation (EPL) and employment security. It indicates that the negative impact of employment security – employees' perceived possibilities to find another job in the labor market – on job insecurity is reduced, the stricter the employment protection. In substance, this implies that employment security does not reduce job insecurity so much in countries with strict EPL, but is very important in countries with liberal labor legislation.

As for temporary contracts, we expected that the strictness of EPL would increase the effect of temporary contracts on job insecurity. The results in Model 6 confirm this expectation. However, a less expected result is that investments in ALMP also seem to add to the difference between permanent and temporary employees with respect to job insecurity (Model 7). In Model 8, all the interactions are analyzed together in the same model. The results are still valid.

We continue with the other dependent variable – well-being – where interaction effects are also revealed. Investment in labor market policies, especially in PLMPs, reduces the negative effect of job insecurity on well-being. A possible interpretation is that a generous UI makes the risk of unemployment less of a stressor for employees.

9.4 Concluding Discussion

In today's globalized markets, companies and organizations seem to strive for flexibility, that is, to be able to change production in relation to upturns and downturns, consumer preferences and technological innovations. Every hindrance to flexibility is believed to affect companies negatively in the global competition, and politically

Table 9.3 Job insecurity and well-being: cross-level interactions

	Dependent: job insecurity				Dependent: well-being	
	Model 5	Model 6	Model 7	Model 8	Model 5	Model 6
Individual level:						
Job insecurity (JI)					-0.270***	-0.269***
Employment security (ES)	-0.060***			-0.060***		
Temporary contract (Permanent = 0)	0.695***		0.721***	0.725***		
Country level:						
EPL	-0.060	-0.068		-0.065		
PLMP					0.466**	
ALMP			-0.381*	-0.382*		0.668*
Interactions:						
ES*EPL	0.060**			0.060**		
Temp*EPL	0.185+			0.169*		
Temp*ALMP			0.423**	0.409**		
JI*PLMP					0.098*	
JI*ALMP						0.171+
Variance:						
Individual level	1.158	1.158	1.153	1.158	19.509	19.505
Country level	0.054	0.054	0.053	0.054	0.138	0.217
-2LL	68,187.030	68,191.668	68,186.298	68,174.128	13,0911.455	130,921,090
Reduction -2LL	8.061**	3.423+	8.793**	20.963***	5.440*	3.535+
n:						
Individual level	22,731				22,478	
Country level	26				26	

Unstandardized coefficients, control for individual-level variables in Model 1 and country-level variables in Model 3 or 4. Mixed-effect multilevel regression with maximum likelihood estimation
Levels of significance: +p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001

one can find a pressure to abolish these obstacles, for example, by deregulating employment protection legislation.

Even though flexibility may boost economic activity, a possible side effect is the appearance of labor markets with increased levels of job insecurity. Employees' uncertainty of the continuance of their job can grow in a situation of change where competencies soon becomes obsolete and employers constantly adjust the size of their staff to the demand for their products. And as is well known, job insecurity of employees can have adverse health effects. The quest for flexibility may therefore be accompanied by a cost of decreased well-being.

However, research has shown that the negative consequences of insecurity and uncertainty can be mitigated if the individual can find strategies to cope with the insecure situation. The focus in this chapter has been on a policy proposal – flexicurity – that emphasizes the importance of creating an institutional setting around the labor market which gives individuals the resources to cope with flexibility.

The proponents of flexicurity believe that a flexible labor market with low job protection should be combined with passive and active labor market policies that make transitions between jobs more secure. Passive measures have to do with a generous unemployment insurance, and active measures to help the unemployed to come back to work. They argue that spending on these kinds of measures is a reasonable way to find a compromise between flexibility and security that employers and employees can agree upon. In this chapter, we have examined how the institutions emphasized in the flexicurity discourse work in relation to employees' experiences of job insecurity and well-being.

The findings from the present study have significance for the evaluation of the flexicurity proposal. First of all, no statistically significant relationship was found between the strictness of the employment protection legislation (EPL) and job insecurity or well-being. This result can be regarded to be in line with the flexicurity formula by downplaying the role of EPL for employees' perceptions of job insecurity and well-being. Furthermore, the analysis reveals a side effect of employment protection legislation, in that temporary employees with insecure jobs may experience even more insecurity, the stricter the EPL. This implies that strict EPL may lead to labor market dualization with a secure centre of protected jobs and an insecure periphery of temporaries unsheltered from labor market flexibility.

However, the analysis also shows that employment security – the security of having options in the external labor market to find another job – becomes more important in situations with liberal rather than strict EPL to reduce insecurity. Employment security is therefore an important compensational mechanism if the EPL is reduced. A similar effect is found also in Berglund et al. (2014) in an analysis of Swedish data where the effect of cognitive job insecurity (the assessed risk of losing a job) on affective job insecurity is reduced in the presence and increased in the absence of employment security. These results seem to give credit to the critics who believe flexicurity – or, more specifically, reduced EPL to achieve flexibility – is not for “bad weather” (Tangien 2010).

Flexicurity is not only about flexibility but also about increased levels of security, especially in the form of unemployment insurance. The results of the present study

are quite clear concerning expenditures of PLMP and ALMP for the level of job insecurity and well-being. High spending in these regards is related to decreased levels of job insecurity and increased levels of well-being. Furthermore, the results indicate that investment decreases the significance of job insecurity on well-being. High spending seems therefore to compensate for the risk of job insecurity. This result is clearly in line with the flexicurity suggestion that generous welfare provisions and active labor market measures increase the security for employees.

To summarize, this study provides some evidence that the flexicurity proposal may constitute a reasonable trade-off for employees in respect of possible effects on job insecurity and well-being. Firstly, the results indicate no relationship between liberal employment protection legislation and high levels of job insecurity or reduced well-being. Flexibility in the labor market may therefore not necessarily imply these kinds of negative effects, although a flourishing labor market seems to be an important ingredient to escape negative effects of low job protection. Secondly, of great importance in the flexicurity formula is spending on welfare provisions, especially unemployment benefits. These measures affect both job insecurity and well-being in favorable directions.

This chapter has focused especially on the flexicurity proposal which has been marketed by its advocates as a way to reconcile flexibility and security in European societies. There are also other suggestions in the discussion as to how this should be done. Life-long learning and social investment in the employability of the work force are important perspectives, emphasizing the importance of education and opportunities to re-learn during the life-course (Forrier and Sels 2003; Morel et al. 2012). The way to secure employment is therefore to create resources for the individual to adapt to what is demanded in the labor market (Schmid 2008). The school system is vital here, and in particular, adult education. However, these policy proposals come many times hand-in-hand with a normative pressure on the individual to be “employable” (Garsten and Jacobsson 2004). Flexicurity is not incompatible with these perspectives. The opportunities for training are one central aspect of the active labor market policies emphasized and are in line with the employability paradigm. Furthermore, when the Danish example is presented, many times this model is described as a “Golden Square” rather than a “Golden Triangle” by also including the country’s very well-developed adult education in the model.

However, a general criticism against the flexicurity proposal that is possible to make is that it only emphasizes the economic or financial aspects of a job. If a job is lost, flexicurity focuses on how the income it generates should be replaced – either by fast finding a new job, or by getting compensation from unemployment insurance. In the perspective of flexicurity, job insecurity seems therefore mainly to be a function of the risk of losing income. However, as emphasized in the beginning of this chapter, a job also has latent functions for people (Jahoda 1982). It is an important source for finding meaning, structure, and social belongingness in life. Losing a job that is meaningful and satisfying, and in which one has developed deep-seated social relations to workmates is to be considered as a great loss. Sometimes, a job loss may imply that one has to move geographically to find a new and leave an established social community. Perhaps one can say, in line with the

concepts of Mark Granovetter (1983), that flexicurity presupposes an individual with rather weak social ties but with a large network of contacts, who is prepared to leave for new challenges. Such individuals stand in stark contrast to employees less mobile, but still developing strong ties to the workplace and the local community. For these people, job insecurity represents a severe threat to who they are and where they belong.

In closing this chapter, a last and important question to ask is what chance flexicurity has in today's political climate to be a realistic policy proposal. In times of crises and austerity, flexicurity may not fall on fertile ground. Denmark, the flexicurity country *par excellence*, is one of the OECD countries that spent most on labor market policies (in 2011, 3.91 % of GDP, in first place out of 28 OECD countries).² And in the wake of the financial and Euro crises with rising unemployment figures, Denmark has started to reduce the generosity of the unemployment insurance by cutting back the maximum duration of benefits from 4 to 2 years (Madsen 2011). Furthermore, central actors in the management of the European crises, for example, the so-called Troika, have pressed countries, especially in Southern Europe, to make labor market reforms in the direction of flexibilization (Bieling 2012; Clauwaert and Schömann 2012). According to the insights of the present study, such reforms may be very risky for employees unless they are accompanied by massive investments in passive and active labor market policies. However, this seems rather unlikely in the presence of large deficits in national budgets. A less glimmering future prospect for European labor markets is therefore flexibility without security.

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²OECD (2010), “Labour market programmes: expenditure and participants,” *OECD Employment and Labour Market Statistics* (database). doi: [10.1787/data-00312-en](https://doi.org/10.1787/data-00312-en) (accessed 29 January 2014).

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Part IV
Job Loss and Unemployment

Chapter 10

Promoting Reemployment and Mental Health Among the Unemployed

Amiram D. Vinokur and Richard H. Price

10.1 Introduction

The onset of the 2008 financial crisis dramatically increased unemployment rates in many countries and they are still high or at or near historic levels in Europe and the United States (EuroStat publication of the European Commission 2014). In 2012, unemployment rate in the 28 EU countries was 10.5 % with rates as high as 24.3 and 25.0 % in Greece and Spain. Furthermore, the long-term unemployment rate of those no longer employed for 12 months or longer was 4.7 %, slightly less than half of the total rate of unemployment. While somewhat lower than in Europe, but still higher than usual, the unemployment in the US during that time was 8.1 % with a long-term unemployment rate of 2.4 %.

Thus, the economic crisis or 2008 will, like many economic crises before it, turned into a prolonged period of economic downturn that will affect millions of workers. Job loss and unemployment represent the loss of vital resources to individuals and also produces an additional cascade of health threatening resource losses. We first review the harmful impact of the loss of these resources and then discuss the various approaches to prevent or mitigate these effects.

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10.1.1 Impact of Unemployment on Physical and Mental Health

When people become unemployed they suffer a cycle of losses of resources which often results in a deterioration of their mental health and social functioning (Feather 1990; Hobfoll 1989). The most obvious of these resource losses is the loss of income from paid work which frequently creates serious financial hardship. Most people around the world are dependent on the income from their employment to provide their basic necessities for food and health and to sustain their standard of living. Job loss means they experience financial strain and setbacks in providing for the necessities of life for themselves and their family. Numerous studies have demonstrated that financial events leading to financial strain are the strongest contributor to the elevated depression and anxiety experienced by the unemployed (Broman et al. 1990; Kessler et al. 1987a; Vinokur and Schul 2002).

The pioneering early writing on unemployment by Marie Jahoda in the 1930s and then later in the 1970s and 1980s vividly described the deprivations experienced by the unemployed (Jahoda et al. 1933; Jahoda 1982). These deprivations include the loss of structured daily activities, the loss of an occupation that is an important source of personal fulfillment, professional esteem, and pride as bread winners for their family, as well as loss of self-esteem, identity and meaning in life. These resource losses, which usually begin with financial losses, create cascades of negative events such as loss of control and diminished functioning (Price et al. 2002), social undermining in family relationships and diminished marital satisfaction (Vinokur et al. 1996) that elevate feelings of depression in the job loser (Dooley et al. 1994) and their spouse/partner (Howe et al. 2004; Vinokur et al. 1996). This cascade of events may contribute to adverse outcomes among the unemployed such as marital separation and divorce (Atkinson et al. 1986; Liem and Liem 1988), drug abuse (Catalano et al. 1993), child abuse (Steinberg et al. 1981) and suicidal ideation (Kessler et al. 1987b).

The detrimental impact of unemployment on mental and physical health has recently been reviewed extensively by Wanberg (2012). In her review she cites meta-analyses studies of the adverse effect of unemployment on well-being by Paul and Moser (2009), and McKee-Ryan et al. (2005), and on suicide by Platt and Hawton (2000). Wanberg (2012) also reviewed studies that suggest unemployment may also have an impact on physical health and mortality, though the evidence is not as strong as evidence on the adverse effects of unemployment on mental health. Thus, the findings of both earlier studies and recent reviews consistently show that job loss and the multiple negative life events and deprivations associated with these events produce a cascade of stressors that lead to adverse effects on both physical and mental health.

10.1.2 How the Harmful Effects of Unemployment Can Be Mitigated?

Several approaches to mitigate the harmful effects of unemployment were inspired by the work of Jahoda (1982). These approaches attempt to replenish the psychological and material benefits of work that are lost with the loss of the job by various programs that involve placing the unemployed in work settings to promote return to work. These programs may include subsidized vocational training and work place participation with various levels of unemployment insurance benefits, often described as income replacement. In a study conducted in Sweden by Strandh (2001) it was found that the workplace participation program with income replacement benefits mitigated the harmful effects on mental health; and that the income replacement benefits mediated the positive effects particularly when unemployment was prolonged.

Another distinct approach to address the harmful effects of job loss is to activate and invigorate the efforts of the unemployed to search and find a job with the goal of regaining paid employment. There are numerous outplacement counseling programs that are offered on individual basis to unemployed workers but we could not find a scientifically sound evaluation of these programs in the literature (e.g., Borgen and Butterfield 2014).

10.1.2.1 Job-Search Programs for Enhancing Reemployment and Mental Health

In contrast to individual counseling programs, beginning in the early 1970s we find empirical tests of various intervention programs delivered to groups of job seekers to enhance their search behavior with the goal of getting a job (e.g., job club: Azrin et al. 1975). These interventions were focused primarily at those short-term unemployed, generally those unemployed less than a year, as distinguished from the long-term unemployed. More elaborate and theory based developments of the early efforts continued in the 1980s and 1990s at the University of Michigan using the JOBS intervention to enhance job-search skills and job-search self-efficacy (Caplan et al. 1989; Vinokur et al. 1995) and the Työhön Job Search Program in Finland (Vuori et al. 2002). The interventions spurred in these efforts turned out to be successful for the short-term unemployed, and at least in one case, also for the subpopulation of long-term unemployed who received generous unemployment benefits (Vuori et al. 2002). More recently, a similar group-based intervention that targeted performance goal orientation as a mechanism to increase job search and reemployment has been reported by van Hooft and Noordzij (2009) to produce promising results. A recent meta-analysis study of all these job search interventions concluded that the odds of finding employment were 2.85 times higher for job seekers participating in them compared to those in the control group (Liu et al. 2013). This analysis also demonstrated that the direct effect of the interventions on employment was also mediated by job search skills, job search self-efficacy and job search behaviors.

Below we offer an exchange theory perspective to understand the phenomenon of unemployment and its implications more comprehensively and to examine ways in which program practice and social policy might be directed.

10.1.2.2 An Exchange Theory Perspective on Unemployment and Programs to Aid the Unemployed

We take an exchange theory perspective to help explicate the challenges faced by job seekers and what is required to implement and disseminate effective programs such as the JOBS program. The exchange perspective was pioneered by Blau (1964) and Emerson (1976) and later similar ideas were used to develop resource dependence theory (Pfeffer Salancik 2007) to describe strategic organizational behavior and conservation of resources theory (Hobfoll 1989) to describe individual coping behavior aimed at seeking and preserving individual resources.

The exchange perspective is based on several assumptions. The first is that all individuals and organizations are *dependent* on resources from their environment. Employed individuals are dependent on the income derived from paid work as well as the psychological resources associated with having an identity as a productive worker for example. Loss of these resources often results in stress and a cascade of health threatening events. Organizations are dependent on resources from their environment to support their programs, to maintain their legitimacy as organizations. Second, to maintain these valued resources individuals or organizations must engage in *exchange relationships* offering appropriate behaviors such as effective performance in a work role or maintaining on certain levels of performance in the case of organizations. Third, since both individuals and organizations are dependent on these valued resources in their environments they will attempt to conserve or seek *alternative sources* of the valued resources if they are threatened or lost.

In the case of job seekers, this means that to successfully seek new jobs they must understand what valued resources of their own they possess such as job skills and work experience they have that they can offer to employers in exchange for paid employment. In the case of organizations this means that organizations must be able to maintain the quality of their services or performance at an acceptable level if they are to continue to receive support from their supporting institutions. In both individual and organizational cases they will cope by attempting to conserve their resources, find alternative resources or exchange them for resources that are more secure.

Employers in the market environment may require job seekers to meet certain work requirements and at the agency level, governments or institutions may require agencies to meet certain standards in an anticipated exchange relationship. This may occur without outside intervention, but in some cases a third-party intervention may be required to guide the transaction to successful completion. Programs such as JOBS (see Price and Vinokur 2014) provide job seekers with an understanding of the nature of the exchange relationship involved in offering one's personal resources in the process of seeking a new job. Similarly in the process of implementation of new programs in an organized service system, all parties need to understand the nature of the resources both material and symbolic resources being exchanged such

as program funding training certification and commit to the agreed upon exchange of resources over longer periods of time.

Implementing an effective program such as the JOBS program using trained facilitators serves this purpose for the individual job seeker. In the case of broad dissemination of a program such as JOBS, a systematic organizational collaboration is required between the government or institutional sponsor and the service agency actually implementing the program to establish the terms of exchange, often in contractual form.

In what follows we will see these processes of resource exchange play out repeatedly (1) in the stress of job loss and its effects on health and wellbeing, (2) in the role of effective job search program models such as JOBS in aiding job seekers obtain new jobs with all their essential resources and (3) in the dissemination of the JOBS program in new national and international systems, and finally (4) in suggesting extensions of the underlying principles of the JOBS program to new program applications that promise to provide resources for populations in need of additional support.

10.1.3 Reemployment as a Gateway to Renewed Financial and Psychological Resources

We begin with the assumption that the negative health impacts of unemployment is caused primarily by cycles of resource loss (Hobfoll 1989). The losses are financial, personal and social including relationships with a spouse or partner, and children and friends. The impact of job loss can be ameliorated by replenishing the losses with new gains. Loss of income from paid employment in some countries is commonly buffered by unemployment benefits (Strandh 2001). These benefits differ widely depending on the social policies of the country in question. However, research has consistently shown a substantial restoration of mental health and wellbeing when reemployment is achieved with renewed financial resources from paid work (Kessler et al. 1989; Ginexi et al. 2000), and a substantial improvement in one's financial position (Vinokur and Schul 1997). Therefore, the most promising sustainable way to promote the mental health of the unemployed is to promote reemployment in good quality work as quickly as possible. The importance of good quality work needs to be highlighted in view of studies that have shown that the mental health of employees with poorest quality of work deteriorates over time, even more than that of the deterioration seen in unemployed workers (Butterworth et al. 2011; Siegrist et al. 2012).

Reemployment not only restores the financial loss in most cases, but also replenishes other functions served by having a job. Promoting reemployment can be achieved through national macroeconomic policy or program. However, smaller scale community based programs focused on job search can help the unemployed return to the market place through their own job search activities. Below we describe research on the JOBS program that can serve as a prototype for establishing local programs and a set of underlying research based principles for both local program delivery and for wider dissemination in service systems.

10.1.4 JOBS Promotes Reemployment and Restores Financial and Psychological Resources

Interventions aimed at the promotion of reemployment must empower the unemployed persons themselves to enact intensive, persistent, and skillful job-search behaviors. These interventions must therefore include features to motivate the unemployed individuals to engage in job search behavior. The JOBS reemployment intervention and the Finnish version called “Työhön” are based on a model that weaves together motivational elements with elements of job search skill building to create a psychological state of job search self-efficacy, which enhances the motivation to engage in intense and persistent job search (Vinokur and Schul 1997, 2002). A similar intervention that emphasizes performance goal orientation has recently been tested by van Hooft and Noordzij (2009). As the JOBS intervention, it also demonstrated enhanced intention to seek jobs, greater job search intensity and a higher rate of reemployment.

A detailed account of the development and design of the JOBS intervention and its evaluation and dissemination has recently been provided in by Price and Vinokur (2014). We briefly describe the JOBS intervention, focusing on its design then review the results of major randomized controlled trials (1) demonstrating the effectiveness of JOBS (2) describing the populations who benefit most from the intervention and (3) the underlying processes that account for its effectiveness and offer (4) research based principles for high quality implementation of job search programs. Following this we offer a brief description of dissemination efforts of the JOBS program in the United States and in other countries and offer principles for effective dissemination of job search programs based on this experience.

10.1.4.1 Design of JOBS

The JOBS intervention is designed as a workshop consisting of 5 half-day sessions (totaling about 20 h) led by two trainers who facilitate the learning of job search skills and the motivation to use them effectively. The intervention uses active learning group process and typically involves a group of 8–18 participants. The workshop is typically held in community facilities (e.g., community centers, schools, churches, union halls) or in rented meeting facilities.

The core of the JOBS intervention is shown in Table 10.1 and includes the activation of active learning and supportive processes to gain the key skills of job-search. The activation of the processes leads to the acquisition of the job-search skills, which in turn, results in enhanced job-search efficacy and inoculation against setbacks; the two major ingredients that were shown in our research to mediate the effects of the intervention on job-search, reemployment and mental health.

Workshop participants are engaged in a standard cycle of activities throughout the sessions. For each major topic of job search, participants are engaged in (1) activities that involve diagnosing desired goals, problems and tasks that are needed to meet the goals; then, moving to (2) diagnosing solutions and skills needed to implement the

Table 10.1 The JOBS program: program features, short term effects on skills and motivation and long term outcomes

JOBS program features	Short term effects on skills and motivation	Long term program outcomes
Topics: discovery of marketable skills, anticipating barriers, effective networking, self-presentation skills, thinking like an employer	Increased job search self-efficacy	More rapid reemployment
	Resilience and inoculation against setbacks	Reduced economic hardship
	Persistent and skilled job search	Improved mental and physical health
Process: group delivery, active learning style, role playing, problem solving, modeling of effective behavior by facilitators	Increased sense of control	Skills and resilience for future job search
Environment: supportive, unconditional positive regard, encourage diversity of beliefs and approaches, sharing personal experiences		

solutions; and finally, (3) engage in practicing these skills. These three-step cycle is repeated again focusing on diagnosing barriers and handling setbacks. While the overall goal of the first three-step cycle is to build job-search self-efficacy, the overall goal of the second three-step cycle is to build inoculation against setbacks.

10.1.4.2 Impact of JOBS on Reemployment and Health

The randomized trials of the JOBS Program and later the Finnish version of the program called Työhön have been shown to prevent poor mental health (Vinokur et al. 1995; Vuori et al. 2002) and promote reemployment (Vinokur et al. 1991a, 1995; Vuori et al. 2002). The impact of the JOBS II, a replication and extension of the initial JOBS intervention, also demonstrated improved role and emotional functioning and also increased rates of reemployment in better quality jobs. In turn, the higher employment rate in better jobs had a significant effect on lowering financial strain (Vinokur and Schul 1997; Vinokur et al. 1995). Furthermore, in both the JOBS and the later Finnish Työhön study it was found that the preventive effects of the intervention extended to 2 years (Vinokur et al. 2000; Vuori and Silvonen 2005). Finally, using a benefit-cost analysis, Vinokur et al. (1991b) demonstrated large economic net benefits of the JOBS intervention for the participants, as well as for state, and the federal government that funded the intervention.

10.1.4.3 Who Benefits Most from JOBS?

Interestingly, the benefits of these job-search interventions are not distributed equally to all the participants. In the initial JOBS trial, Price et al. (2002) found that a subgroup of participants which at the outset were characterized primarily as

experiencing higher levels of depression symptoms, but short of clinical level, benefitted from the JOBS intervention most in terms of future reduction in depressive symptoms. The same result was tested prospectively and replicated in the JOBS II trial (Vinokur et al. 1995). The Finnish Työhön study demonstrated similar results (Vuori et al. 2002).

10.1.4.4 What Makes JOBS Effective?

Further research was aimed at uncovering the active ingredients of JOBS by examining the mediating mechanisms of the intervention. Following the first JOBS randomized trial, van Ryn and Vinokur (1992) demonstrated that the increase in the sense of job-search efficacy was as a critical mediator that increased the intention and the intensity of job-search behavior. In the investigation of the second JOBS trial, Vinokur and Schul (1997) reported again that sense of mastery that includes job-search efficacy mediated the effects of the intervention on both reemployment and mental health. In addition they found that the intervention increased inoculation against setbacks and resilience by protecting job seekers from depression when the event of a second job loss occurred following reemployment. In a similar vein, based on the Finnish Työhön randomized trial, Vuori and Vinokur (2005) identified job search preparedness, the combination of job-search self-efficacy and inoculation against setbacks, as a key mechanism that accounted for the benefit derived by the participants from the Finnish Työhön intervention. Finally, Choi et al. (2003) showed that group processes that enhance job-search efficacy were key ingredients in group-based aspects of the JOBS intervention.

10.2 Key Outcomes of Dissemination: Demonstration, Sustainability and Innovation

Identifying populations who will most benefit from a program and ensuring that the program itself offers the appropriate opportunity for skill development and motivation are important, but they are of little value if effective methods are not available for disseminating the program. In what follows we describe five cases of program dissemination of the JOBS program both in the United States and internationally. While the initial implementation of JOBS was successful in all cases, the outcomes beyond initial implementation were quite different. In some cases, the dissemination did not continue beyond a large initial demonstration, in others, the JOBS program or its local version showed sustainability beyond the initial implementation period and program innovations were initiated to respond to the needs of local populations in need. These cases suggest testable hypotheses for promoting successful program dissemination (Rogers 1995; Price et al. 1998). Table 10.2 summarizes the key features of implementation that led to varying degrees of sustained success in dissemination across the five cases.

Table 10.2 Six cases of JOBS implementation with varying levels of support for long term adoption and continuing innovation

Implementation case	California	China	Ireland	Maryland	Finland
Demonstration completed successfully	X	X	X	X	X
Innovation champion present		X	X	X	X
Continuing champion advocacy			X	X	X
Agencies open to program innovation			X	X	X
Agencies have resources to implement				X	X
System support for innovation				X	X
System funding for sustaining				X	X

10.2.1 *California and China: Demonstration Without Sustainability*

With funding from the California Wellness Foundation, the Michigan Prevention Research Center (MPRC), in collaboration with the Claremont Graduate School and the Manpower Demonstration Research Corporation, the JOBS program was disseminated in three diverse community sites in California as a large scale demonstration project (Price et al. 1998). As part of the demonstration project 30 group workshop facilitators were trained in Michigan for 2 weeks with later on site follow-up training and supervision in California. Subsequently, 6,500 unemployed persons in California participated in the demonstration program. The 5-year large scale demonstration project established the viability of the JOBS workshop for adoption by community based organizations. Choi et al. (2003) showed that the group learning environment designed as a key feature of the workshop produced enhancement in job-search efficacy that was critical for later successful job-search efforts. However, despite the successful demonstration the California program, no local champion for the program emerged and it was not continued or expanded to other service sites in California.

In the People's Republic of China a rapidly changing economy from state socialism to a market based system has meant that State Owned Enterprises that supported many Chinese workers were subject to market pressures and downsizing of the work force (Price and Fang 2002). The Michigan Prevention Research Center entered into collaboration with the Institute of Psychology of the Chinese National Academy of Science to deliver the JOBS program in seven cities in China (Price and Fang 2002). After initial planning the training was delivered by MPRC training staff in collaboration with Chinese colleagues to agency staff from seven cities and the Chinese version of the program was delivered and evaluated in all seven sites. While the program had a champion for the initial successful demonstrations, the Ministry of Labor did not support continuation of the program. However, data from the project on the effect of job loss and unemployment on family dynamics yielded interesting and important results (Price et al. 2006).

It is notable that both of these implementation projects successfully met their initial demonstration objectives and also yielded valuable scientific results. But despite a substantial initial investment of resources for demonstration, neither project continued beyond the initial demonstration stage. In neither case was a commitment of resources for continuation beyond the initial demonstration phase offered by government sponsors even if the project proved successful. It seems clear from these examples and from previous research (Rogers 1995) that locally based scientifically verifiable demonstration of the positive impact of new programs is not enough for successful and sustainable large scale dissemination.

Ireland, Maryland and Finland: Success depends on the spectrum of support for adoption and innovation. Ireland has had both times of economic expansion and periods of dramatic downturn over the last several decades. Irish workers, particularly in rural and northern areas, have experienced long and severe periods of job loss and unemployment. The JOBS program has been implemented through collaboration with colleagues at the National University of Ireland and Irish Health Service to implement the program with experimental trials both in Northern Ireland and in the Republic of Ireland. The JOBS program was shown to be effective not only with chronically unemployed Irish workers, but also with service recipients in the mental health system (Barry 2005). Leadership by our colleagues both in the University of Ireland and in the Irish Health Service to advocate for the program created interest in local agencies and some funding support. As the high and nearly intractable unemployment rate in Ireland continued the new interest has developed in providing innovative workshops to encourage participation in volunteer roles in the community.

The JOBS program was also implemented and evaluated in the State of Maryland as the central component of a mandated program "From the Ground Up" for welfare-to-work clients and was administered by the Department of Social Services of Baltimore County. During that period, 1,543 welfare applicants participated in the workshops. The intervention workshop increased participants' sense of mastery and control as well as job-search efficacy, which, in turn increased job search intention and reemployment (Lee and Vinokur 2007). Participation in the workshop also resulted in improved mental health and well-being and facilitated the entry of the participants into the work force. The program with its positive impact on clients has continued to operate in its original form for the past 12 years with a stream of support from the community college system in which it is embedded. In addition the Maryland program created a successful innovation in providing the program to welfare clients, a population with greater needs than most of the unemployed population. Both the sustained funding stream and supportive service system in which the JOBS program was embedded are clear assets to successful sustained program delivery.

The earliest and ultimately the most successful dissemination effort has taken in Finland. The Finnish Institute of Occupational Health with later support from the Ministry of Labor in Finland funded the dissemination of the JOBS program, (locally named "Työhön"), in the city of Turku and later in a large-scale nationwide

program. The positive initial research evidence from the first Työhön trial in Turku led to an expansion to a nationwide program. Results were very similar to those demonstrated by the JOBS program in the US, showing that the program promoted the mental health of the unemployed and facilitated in their re-entry to the work force (Vuori et al. 2002).

As in the US version of the JOBS program, the results also demonstrated that self-efficacy and inoculation against set-backs were the key mediating mechanisms of the intervention (Vuori and Vinokur 2005). Finally, the wealth of data from the national program was subjected to a cross-level analysis that identified trainer skill level and preparation of participants for setbacks as the critical group level factors responsible for the positive effects of the intervention (Vuori et al. 2005). Beyond these developments, innovative new programs have been developed using the JOBS group based intervention principles and successfully implemented to serve youths making career choices in elementary schools (Vuori et al. 2008) and most recently to help workers in the Finnish work force make better decisions about sustainable careers and retirement (Vuori et al. 2012).

These cases show that demonstration of scientifically proven programs is not by itself enough for large scale adoption of innovative programs like JOBS. Our experience suggests that, as Table 10.2 implies, that sustained successful dissemination and additional program innovation to meet local needs requires a combination of skillful advocacy by a program champion, receptive delivery sites with adequate resources to actually implement the program, and long term financial and political support from sponsoring institutions.

10.3 When Job Search Programs Are Not Enough

There are circumstances where programs to promote paid reemployment may not be feasible either because of the absence of jobs due to economic conditions that may make reemployment difficult or due to lack of skills in specific disadvantaged populations such as older or disabled workers. Interventions that focus on the needs of these populations can be developed using the proven behavioral principles first developed in the JOBS program. For example programs designed to help with financial management skills and stresses as within families are needed for people experience in prolonged periods of unemployment. In what follows we draw broadly on social exchange theory (Emerson 1976) and the conservation of resources framework (Hobfoll 1989) to conceptualizing new pathways to new relationships skills and enhanced mental health.

A well-organized community program to help long term unemployed individuals might begin with a need assessment phase that includes assessment of occupational goals, financial needs, family relationships status and problems, and psychological well-being. Based on the assessment the unemployed person or indeed the entire family could be invited to participate in relevant community interventions – for

example, a job-search workshop intervention, financial planning workshop, family relationship workshop, and/or a general improving well-being workshop. Our research experience suggests workshop interventions could be delivered to groups of 8–18 participants because the group method of delivery is both more effective and more economical. Group learning provides an effective way to de-stigmatize bad experiences, facilitates role modeling and creates an opportunity for role playing exercises in giving and receiving help from similar others, and allows participation in richer informative discussion for problem solving. Ideally the delivery of such interventions would be guided by two training facilitators rather than one because two trainers can more readily expand the effectiveness of training by demonstrating role modeling, monitoring the reactions of group members more carefully and respond accordingly.

A financial management and planning workshop could address how to deal with all household and family financial issues including costs of housing, health care, education and daily living. Participants could learn how to set priorities, prepare and monitor basic budget and perhaps most importantly, how to collaborate on these matters in a cooperative manner with significant others and children. In addition, participants could learn about various federal, state and community programs that provide financial aid, their eligibility to these programs and would be provided with help in applying to such programs. A family relationship workshop might aid navigating the social relationships with spouse, partner, children and other significant others during a stressful period of unemployment. For those seeking a job, this type of intervention could also facilitate their job-search efforts as conflict is avoided and energies could be deployed to a more effective job-search. A family relationship workshop could be based on what is known about best practices in couple education (Halford et al. 2003; Laurenceau et al. 2004) and apply these practices to the issues that emerge and persist during unemployment.

Finally some unemployed people may not seek to return to the workforce because they lack marketable job skills or because of advanced age or poor health status. To protect the health and well-being of this population of the unemployed a workshop intervention could be designed to get them involved in activities that replace some of the psychological functions of paid work. Individuals become volunteers in service provider organizations providing a new social role embedded in a social network to allow the rebuilding of lost social connections, and a way to structure time and daily activities. Volunteers in a service organization are likely to re-experience new pride and self-esteem as contributing members to the community (Musick et al. 1999; Thoits and Hewitt 2001; Wilson 2000).

All these elements of positive activities could be combined in a special workshop formed as a guided self-help group with trained group facilitators. Yet, since the majority of unemployed individuals are those who need or prefer to reenter the labor market we argue that the most important way for improving their mental health and well-being is to facilitate their reentry to paid work through their job search activities. Thus, we devote our next section primarily to describe examples and features of community based successful job-search workshop interventions.

10.4 Recommendations for the Future

It is now clear from a vast array of research evidence that involuntary job loss and unemployment produce a cascade of losses that in turn produce stressful and health threatening impacts on both the unemployed and their families. It is now equally clear that carefully designed and implemented job search programs such as JOBS and similar programs such as Työhön in Finland can facilitate the return to reemployment and with it reduce the health and mental health risks associated with unemployment, economic hardship and family distress. The key mechanisms underlying effective programs including (1) social support, (2) inoculation against setbacks and (3) promoting skills in the search process all can be embedded in high quality programs only with careful training of facilitators and quality monitoring and continued of the program itself.

However, our experience with large scale dissemination in both US and international settings suggests that real large scale impact can only be achieved if a number additional conditions are met including the presence of (1) an active and effective champion of the program to advocate for its support at the policy level, (2) service delivery agencies that are open to innovation, and finally (3) a continuing flow of resources and funding to sustain the program over time.

Finally while a great deal of attention is given to the plight of the unemployed attempting to re-enter the labor market, there is also a need to devote more attention to subpopulations of the unemployed that are not able to return to the job market due to lack of employable skills, advanced age, or poor health status. Different interventions could be developed to accommodate the mental health and well-being needs of these subpopulations. Thus, those who lack marketable skills may do well in retraining programs designed for their skill level. Other unemployed individuals may fare better in more general health and well-being promotion programs. In short, there is a need to plan and design intervention programs to accommodate the special need populations of drop-out youth, single parents, older workers, retirees, the disabled, and immigrant groups. In all of these groups unemployment is at higher rates than the general population and the challenge to join the paid labor force is difficult to overcome but alternative programs can bring them other life affirming experiences and purposes.

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Chapter 11

The Fragility of Employability: A Dynamic Perspective and Examples from the Netherlands

Jos Sanders, Luc Dorenbosch, and Roland Blonk

11.1 The Fragility of Employability: A Dynamic Perspective

11.1.1 Introduction

Sustainable employability has been moving up the public and political agenda for several years, with demographic trends in the working population having a dominant role. Various measures have been taken to head off future shortages on the labour market, such as by closing off early retirement routes and increasing the retirement age, first to 66 and eventually to 67. However, these measures alone are expected to be insufficient to overcome the predicted human resource shortage. Promoting mobility on the labour market and countering skills obsolescence are issues of equal importance. The need for these measures is becoming more pressing because of the current financial and economic crisis, and is compelling players on the labour market to act, with some measures being urgently required. Making employability more sustainable is therefore a topical issue for firms, institutions and policymakers alike. However, the theme is becoming conspicuously more important for workers themselves, as well as for firms and policymakers. The goal in sustainable employability is to overcome the foreseen *quantitative* and *qualitative* mismatches on the labour market.

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11.1.1.1 From Employability to Sustainable Employability

Policy oriented to preventing mismatches makes frequent reference to employability. Employability is defined as ‘the *likelihood* of a job on the internal or external labour market’ (Forrier and Sels 2003). ‘Sustainable employability’ goes one step further, with the implied consideration, when working on employability, of changes over time in people and jobs. Some examples would be changes in workers’ motivation and the role played by ‘work’ throughout the life course, or changes in the skills and physical and cognitive capacities demanded on the labour market. Sustainable employability is, in this sense, strongly linked with how well people anticipate and handle change and its effects, and their ability to do so. ‘Sustainable employability’, like ‘employability’, is about the likelihood of retaining meaningful and challenging work: a job in which a person can remain healthy and productive to retirement age and beyond.

11.1.1.2 Fragility of Employability

One way of understanding sustainable employability is to consider the factors that make someone’s employability less sustainable, or *fragile*. One of the most important factors in this regard is education, and, more particularly, the possession of a basic qualification. Studies have shown that low skilled workers are relatively often in temporary jobs with little job security and that on average, low skilled workers tend to be less healthy and more likely to have chronic disorders that have a detrimental effect on their employability. Also, they are sick more often and for longer periods, often leading to a premature exit from the labour market (Nicoletti and Peracchi 2001; Phillipson and Smith 2005; Henkens et al. 2009). In addition, research has shown that workers with no basic qualification have a human capital disadvantage that is actually increasing because employers and workers themselves invest less in the human capital of lower educated workers (Heckman 2000; Fouarge 2009; Ester and Kerkhofs 2009). The lack of a basic qualification is therefore one of the indicators of a relatively fragile employability. However, the lack of a basic qualification does not *necessarily* make the employability fragile. The reverse is also the case: having a basic qualification is no guarantee of sustainable employability. For instance, hundreds of thousands of workers with a basic qualification are now in jobs that are bound to change in the next few years, some of which drastically. Relatively fragile employability is also a feature of these groups of working people. We do not therefore detect causes for fragile employability only in an inadequate or poorly matching basic education, but also in the changing employment structure and successive waves of technological and organizational change in and around work. These factors lead to constant shifts in the demand for knowledge and skills. Gaining a qualification is therefore ‘just’ a first step towards making employability more

sustainable. *Maintaining* qualification (skills) and motivation throughout a career is at least as important in rendering employability more sustainable.

This contribution introduces a dynamic perspective on sustainable employability, identifying two ‘mechanisms’ that exacerbate the fragility of a person’s employability, and highlight the importance of maintenance. These mechanisms are *skills obsolescence*, which creates mismatches in the course of a career between what workers are able to do and what the job and the labour market demand; and *motivation erosion*, which creates mismatches in the course of a career between what workers seek to get out of their work and what the work gives them. With these mechanisms in mind, we discuss three main routes for making employability more sustainable: development, work design, and mobilization. The following questions are raised in this contribution.

1. What do we understand by sustainable and fragile employability from the perspective of a *dynamic person-job fit*?
2. What are the threats to sustainable employability in terms of skills obsolescence and motivation erosion?
3. What routes are available for making employability more sustainable in terms of ‘restoration’ and ‘maintenance’ of the person-job fit?
4. What potentially fruitful interventions are associated with these routes?

11.1.2 Sustainable or Fragile Employability: A Dynamic Person-Job Fit Perspective

Recent decades have seen considerable attention to the ‘humanization’ of work. In the tradition of the Human Relations movement, more attention has been demanded for workers’ human needs. Giving more attention to these needs is thought to actually boost productivity. In academic research this trend was continued in theories such as task redesign (Hackman and Oldham 1976). This theory is oriented to identifying essential building blocks of work that give meaning to work and accordingly lead to lower rates of absence through illness and better work performance. Over the years, knowledge about healthy and productive work has been enhanced with insights from the stress and burnout literature (Karasek 1979; Maslach et al. 2001), team and sociotechnical literature (De Sitter 1994), and medical and ergonomic literature (Campion et al. 2005; Humphrey et al. 2007). The quest for the optimum arrangement of workplace and work process has proceeded along many lines.

The fundamental assumption throughout is that compliance with certain design requirements and norm values will render the quality of work transparent. Fine tuning, supplementary policy and redesign are assumed to add quality to work and achieve a better person-job fit, with all the attendant benefits for absenteeism, productivity and employability (see also Grant and Parker 2009; Parker et al. 2010). Nonetheless, there would appear to be no clear-cut relationship between the quality

of the work and the outcomes for workers (e.g. for health, motivation and employability) and employers (e.g. for productivity, absenteeism and turnover). The literature puts forward two explanations for this:

- *individual differences between workers*: workers' opinions differ on aspects of the work; what one person finds varied or heavy work may be perceived quite differently by someone else;
- *time-related differences*: the same workers respond differently in the course of time to the same work characteristics; what a worker considers to be varied or heavy work at time 1 may be found by the same worker to be less so at time 2.

The differences between individual workers and the changes in the perception of work over time are the criteria for assessing the quality of work in terms of a good *person-job fit*. Academic research into this *person-job fit* (e.g. Kristof 1996) identifies two types of 'fit':

- one between what the work demands and what the worker is capable of (i.e. the demands-abilities (D-A) fit);
- the other between what the worker wants or values and what the work provides (i.e. the supplies-values (S-V) fit).

Kristof (1996) assumes moreover that a D-A fit or misfit has a stronger relationship with health and performance indicators, while an S-V fit or misfit has a stronger relationship with motivational aspects and attitudes to the work and the organization. Workers may be perfectly capable of coping with the demands of their job, yet not find the work actually meaningful. On the other hand, the work may fit well with personal values (such as attaching importance to providing excellent patient care), while the worker is no longer able to meet the cognitive, emotional or physical requirements of the job (lifting patients, dealing with new medical technology).

11.1.2.1 Dynamic Person-Job Misfits and Sustainable Employability

When recruiting, employers will assess whether the job matches both a candidate's knowledge and skills and their motivation. On the other hand, a worker will assess whether the work being offered matches their knowledge, skills, interests, values and financial and other needs. This is the first point at which misfits can be avoided, and if there is any doubt there is always the option of a trial period, a temporary contract, or both.

Misfits may arise in time for a variety of reasons as a result of changes either in the job or on the part of the worker. From this perspective, a worker is sustainably employable if what the work *demands* and *provides* matches what the worker is *able* and *willing* to do, and if at the same time the worker is personally capable of protecting and maintaining this fit over time, using current information about developments within and around the work. In our view, sustainable employability is explicitly about a *dynamic* fit between work and worker, where workers are always optimally employable despite changes in the person, work, or employment situation. This approach also

conforms with Van der Klink et al.’s (2010) definition of sustainable employability: ‘Sustainable employability means that throughout their working lives workers have access to actually achievable opportunities and the conditions needed to continue to perform in their current and future work while preserving health and wellbeing’.

With this dynamic fit approach we distinguish three dimensions for assessing workers’ employability over time. Misfits that may occur on these dimensions influence the willingness and ability to work in a given job. Two ‘demands-abilities’ (D-A) misfits reflect the concept of *skills obsolescence*, where a distinction may be drawn between misfits resulting from changing physical or mental health and those resulting from changes in the knowledge and skills that are demanded or provided. The ‘supplies-values/needs’ (S-V) misfits reflect the concept of *motivation erosion*.

Skills obsolescence:

- the demands in the work on physical and mental capacity do not, or no longer, match a worker’s physical and mental capacity (D-A misfit) (health);
- the demands in the work on knowledge and skills do not, or no longer, match a worker’s knowledge and skills (D-A misfit) (knowledge and skills).

Motivation erosion:

- the meaning that the work gives does not, or no longer, matches a worker’s work-related or other values and needs (S-V misfit) (motivation).

Figure 11.1 shows the dynamic person-job fit theory in relation to the processes of skills obsolescence and motivation erosion. In the first situation (left of the figure) there is a satisfactory fit between what the work demands or provides and what the worker is willing and able to do. In the second situation (on the right) it would appear that as time passes the worker sees their needs and values reflected ever less in the work, which may arise from the nature of, or changes in, either the work or the worker. The figure also shows that skills obsolescence and motivation erosion make the work ‘fit’ less well than previously with the worker’s skills and motivation.

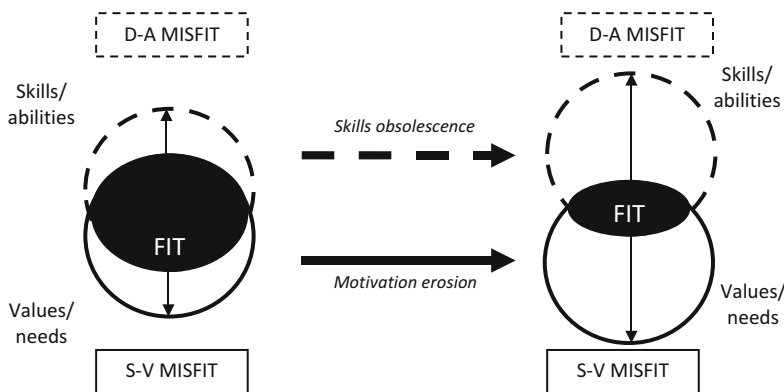


Fig. 11.1 Dynamic person-job fit

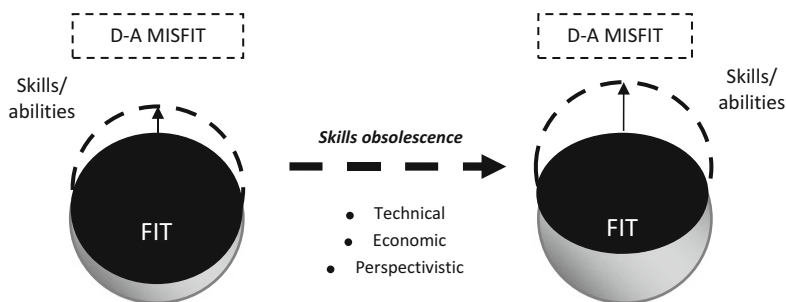


Fig. 11.2 The mechanism of skills obsolescence

11.1.2.2 Mechanisms of Skills Obsolescence

Following Neuman and Weiss (1995), Van Loo et al. (2001), de Grip and van Loo (2002), Sanders et al. (2003) and others (for a complete review see Sanders and Kraan 2013), we refer to the process in which a misfit arises between the physical capacities or the knowledge and skills that a person provides, and the capacities and knowledge and skills that a job demands, as ‘skills obsolescence’. A person’s knowledge and skills gradually lose value, because they can be brought into play ever less productively, if at all. Figure 11.2 shows the various forms of skills obsolescence that can render employability (FIT) fragile. The dark area indicates ‘employability (FIT)’.

Neuman and Weiss (1995) distinguish between *technical* and *economic* skills obsolescence. Thijssen (2001) recently added ‘*perspectivistic*’ obsolescence.

Technical Skills Obsolescence

Technical skills obsolescence is a depreciation of human capital attributable to changes in or around workers themselves. It emerges when a person simply loses their command of certain skills, such as physical or mental capacities (*wear*), or because, temporarily or permanently, available skills are used insufficiently, or not at all (*atrophy*). Technical skills obsolescence is also referred to as internal depreciation, or depreciation of human capital.

Economic Skills Obsolescence

Economic skills obsolescence is concerned with a depreciation of human capital caused by external changes (external depreciation of human capital). Economic skills obsolescence may therefore arise because of a range of technological, organizational and labour market developments. There are three forms of economic skills

obsolescence. Job-specific skills obsolescence, which sets in when the skills that are required for certain jobs change, and may eventually lead to people in the job concerned no longer being able to satisfy the changed job requirements (such as a higher level of abstraction, or greater social skills). A second form of economic skills obsolescence comes about because of a decline in demand for certain skills on the labour market. This form of skills obsolescence can be found in conditions of shrinking employment in a given sector, and may be referred to as skills obsolescence by changes in the employment situation. An often-used example is the high unemployment rate in the province of Limburg following closure of the local coal mines. The knowledge and skills once needed in the mines appeared to have little value elsewhere. Finally, employed people are sometimes obliged to change firm, having been made redundant because of developments at company level. Reorganizations and job cuts may entail dismissals. In this case the firm-specific human capital (such as knowledge of specific equipment and procedures) will be lost: firm-specific skills obsolescence.

Perspectivistic Skills Obsolescence

A third ‘main’ form of skills obsolescence, alongside technical and economic, which was introduced by Thijssen (2001), is ‘perspectivistic obsolescence’. Perspectivistic obsolescence refers to a person’s outdated perspective and views on work-related and occupational trends. Not only does a person’s vision come to be shared by only a small group of intimates, but most coworkers consider them to be ‘old-fashioned’. Research by Leisink et al. (2004) has demonstrated the link between this form of skills obsolescence and early labour market exit.

11.1.2.3 Mechanisms of Motivation Erosion

Continuing to work for longer is a problem for workers with a low educational level, most of whom will have started work at a young age, and who also want to stop working earlier (Solinge et al. 2009). The question is why specifically these groups of workers want to stop earlier, and how much this wanting to stop earlier has to do with factors such as their own needs no longer being met in the current job. Could it be that alongside the mechanism of skills obsolescence there is also a mechanism of ‘motivation erosion’ and is there a relationship between the two in that motivation erosion may lead to skills obsolescence and vice versa?

Figure 11.3 shows how motivation erosion arises (S-V misfits) between work on the one hand and workers’ work-related needs and motives in the course of time on the other. Based on research conducted by Warr (2008) and Van den Broeck et al. (2011), we divide the motivation erosion mechanism into *extrinsic*, *intrinsic* and *social* work motives.

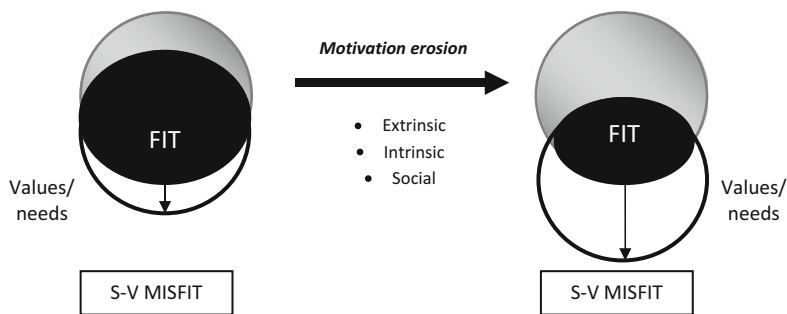


Fig. 11.3 The motivation erosion mechanism

Educational Level, Work Orientation and Motivation Erosion

Warr (2008) shows that less-educated people attach greater value to extrinsic work values, such as job security, income and comfortable working conditions, than to intrinsic aspects of the job, such as challenging work, career opportunities, or opportunities for personal initiative. These findings are confirmed in a study by Van den Broeck et al. (2011), which shows that a higher educational level corresponds with fewer extrinsic work orientations, while the intrinsic work orientations actually increase in line with educational level. According to Van den Broeck et al. there are no significant differences in the value that workers attach to social work values (such as a pleasant atmosphere and stimulating coworkers) across educational levels. Stamov-Roßnagel and Hertel (2010) find that complex white-collar jobs have a richer potential for qualitative changes in motivation than lower-skilled work that involves a limited set of, usually repetitive, tasks. Less-educated workers will therefore be more likely to seek compensation for their monotonous work outside the immediate job. Conversely, more highly educated workers have more opportunities to bring variation into their more complex tasks and work, and so are able to give more meaning to their work. This is consistent with Warr's (2008) findings, and explains the differences in work values by educational background. All in all it would appear that less-educated workers prefer extrinsic work values.

Age, Work Orientation and Motivation Erosion

Besides the differences between, for example, more highly and less highly educated people in what they consider important in work, work motives also appear to be unstable over time. Work motives change with increasing age. Stamov-Roßnagel and Hertel (2010) observe, for example, that the importance of work declines for workers aged 55 and above, in favour of the importance of family and health. There is also a tendency for social relationships at work to become more important at the expense of relatively 'hard' values, such as influence, high income and career. Intrinsic values, such as learning and self-realization, would appear to be equally

important over time. Younger workers are more inclined to gather more resources, whereas older workers focus on retaining what they consider important. People can then compensate for loss of motivation for some tasks through increased motivation for others. As the time remaining becomes shorter, older workers also appear to seek reward with a focus on more emotional values, which has a favourable effect on their mental wellbeing. For instance, tasks that enable older workers to transfer knowledge to younger workers contribute to positive feelings in older workers if accompanied by a display of mastership and positive feedback.

In order to clarify motivation in older workers and find strategies for maintaining this motivation, Kooij (2010) recently compared and contrasted several life course theories, such as Baltes and Carstensen (1999) Selective Optimization and Compensation (SOC) Theory, Heckhausen's and Schulz (1995) Control Theory, and Carstensen's (1995) Social-Emotional Selectivity Theory. Starting from these theories they arrive at the hypothesis that growth motives decline with age and social and intrinsic motives actually increase. They then tested and confirmed this hypothesis in a meta-analysis of 86 studies. Motives such as challenging work, promotion, working with people, confirmation and high income become less important with age, and motives such as job content, the use of skills, the performance of worthwhile tasks, autonomy, helping other people and job security actually become more important. Kooij's findings give rise to many follow-up questions: such as, how susceptible are changes in work motives to influence or 'exploitation'?; or do these changes in work actually have an adverse effect on employability, and how to limit these; and, if they can be limited, what would be the most appropriate route for making employability more sustainable. Another question is about whether or not different routes to sustainable employability are appropriate for less-educated and/or older people, compared to higher educated and/or younger people.

Motivation Erosion and Sustainable Employability

Recent research by Van Zwieten et al. (2011) shows the particularly important role of the need for leisure time in older age in the preservation of work motivation in a general sense. Van Zwieten et al. (2011) also show that the desired retirement age is related to a workers' satisfaction with the conditions of employment. Satisfaction with flexibility (regarding time and place) in work contributes significantly to a higher desired retirement age. Conversely, greater dissatisfaction regarding time and place flexibility is related to 'erosion' of work motivation and thereby also to a more fragile employability. Making employability more sustainable in terms of wanting to continue working for longer could therefore be achieved by increasing satisfaction with the personal opportunities for determining the division between work and private time (part-time, more flexible working hours, home working, and leave and holiday entitlement). The degree of satisfaction with conditions of employment, such as income and development, are not linked to a higher desired retirement age. A possible explanation for this lack of connection is that as people age they pay more attention to retaining functions and controlling loss (Baltes and Carstensen 1999).

Conditions of employment of this type (time and place packages) enable older workers to continue to work (at the same level) *despite* a possible loss of physical capacities (technical skills obsolescence) and despite the impact of changing circumstances in and around the work, whereby skills that are present decline in value (economic skills obsolescence). Connected with this, a worker will have different needs in different life and career phases, both in and around work. For instance, in the course of time many workers shift their emphasis from work to family (Henkens and Van Solinge 2003). Workers who remain satisfied into later life with the perceived time and place flexibility in their current job, perceive less ‘gain’ from stopping work earlier, and will therefore remain employable for longer. Indeed, in their view they will be able to combine work and private lives well, and will be free to postpone or avoid choosing between the two. Motivation erosion in terms of increasing dissatisfaction with the time and place flexibility provided in the work relative to what is desired, will actually drive workers out of the labour process sooner. These results raise several interesting questions. One example is how less-educated and more highly educated workers differ in terms of the importance attached to, and satisfaction with, time and place flexibility, and the importance of this satisfaction for the willingness to continue working. Another follow-up question relates to whether some of the need for more time and place flexibility derives from the declining expectation of still achieving satisfaction from the work itself. This declining expectation on the part of workers might be exacerbated by employers themselves also starting to expect less of older workers, whereby any scope for flexibility will be utilized less, if at all.

11.1.2.4 The Relationship Between Skills Obsolescence and Motivation Erosion

To conclude, in a recent panel-study among workers aged 45–64. Sanders et al. (2013), show that perceived skills obsolescence triggers motivation erosion among older workers and that motivation erosion in its turn triggers perceived skills obsolescence. This interrelationship between the mechanisms of motivation erosion and skills obsolescence is reason enough to start working on preventing either mechanism from taking place, because both harm employability and appear to trigger a downward spiral toward fragile employability and an early exit from the labour market, but also a loss of labour productivity and a waste of human capital. In the next section we introduce three routes to turn this downward spiral around and go from fragile to sustainable employability.

11.2 Routes to Sustainable Employability

Sustainable employability would appear to be a complex interaction between what workers want and are able to do in their work, and what is still, or possibly is no longer, provided and demanded. As expectations as to what the work still has to

offer decline, workers might increasingly focus on extrinsic matters, such as a high income and the need for leisure time. We refer to this phenomenon as *work* motivation erosion, where the motives for wanting to continue to work shift progressively from obtaining satisfaction from the work to obtaining satisfaction from leisure time, to which end work is only a means. The decline in work motivation is accompanied by a declining need for growth and development, which, in view of the dynamics of the labour market, may make workers reluctant to go with the flow. From the perspective of a dynamic person-job fit, this leads to a more fragile employability instead of a sustainable one.

In the terminology of the ‘fit’ literature, an HR perspective on sustainable employability is concerned with managing the mechanisms that influence the person-job fit (either D-A or S-V fit) (see also Kristof 1996). This contribution focuses on three directions of intervention, or ‘routes for making employability more sustainable’:

- *Person*→*Job Fit* (Development route): the worker adapts to the work through development, education and training;
- *Person*→←*Job Fit* (Mobility route): the worker and work are adapted. A person changes job internally or externally;
- *Job*→*Person Fit* (Job redesign route): the work or conditions of employment are adapted to the worker (cushioning or utilization).

The three ‘routes’ for making employability more sustainable and how they are interpreted are to some degree extensions of each other. However, each of these routes can, separately, also be effective in the pursuit of making employability more sustainable. Figure 11.4 is an overview of the intended outcomes of the various routes, i.e.: (1) a better match between existing and required physical and mental capacities; (2) a better match between existing and required knowledge and skills; and (3) greater satisfaction of work motives in the work.

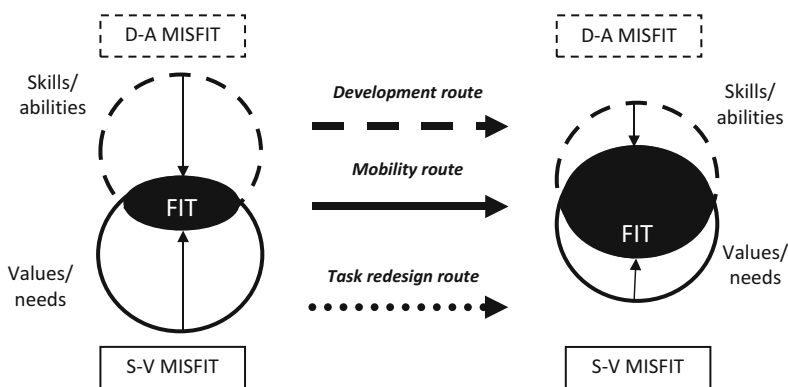


Fig. 11.4 Routes for sustainable employability

11.2.1 Development Route to Sustainable Employability

The first route to sustainable employability targets actions for workers who are at risk of falling behind in terms of knowledge and skills. In the form of education or training ('development'), workers are kept up to date more or less continuously, to enable them to cope with the job level or content both now and in the future. This route relates to the choice employers make to continue investing in training and education in order to attract and retain well-qualified workers. The development route explicitly does not focus only on the maintenance or development of know-how and skills, but also on preserving mental and physical fitness, through such means as working conditions policy, working attitude and safety culture. An important fundamental idea in this route is that permanent physical, mental and cognitive development contributes to making employability more sustainable.

The development route therefore requires workers to invest continuously in themselves. Self-direction is an important related theme. The essence of self-direction is for the worker concerned to retain as much control as possible of remaining sustainably employable. Self-direction in the work context is defined as 'a characteristic adaptation to influencing processes in the working life in the interests of individual self-reliance on the labour market' (Raemdonck 2006, p. 62). In line with the emphasis on life-long learning, many studies focus on 'self-directed learning' (Raemdonck et al. 2008). Self-direction in learning is about taking personal initiative to undertake formal and informal learning activities leading to the achievement of specific learning objectives, which help in meeting the changing work requirements. Some examples are participation in training courses, workshops, knowledge sharing with co-workers, and searching for and interpreting information related to the discipline concerned. Research has shown that participation in learning activities helps make employability more sustainable (Sanders and De Grip 2004; Raemdonck et al. 2008), especially when a learning activity is a 'positive experience' (Damen et al. 2013).

The main deficiency in practice would appear to be in the participation of less-educated people in post-initial education or training (Sanders et al. 2011a). Research by Raemdonck (2006) shows furthermore that less-educated people exhibit little self-direction in learning. However, a multivariate analysis also showed educational level as such not to be an explanatory variable for the degree of self-direction in learning and career. Other factors, such as performing knowledge work, being given learning opportunities, and aspirations for mobility, appear to be stronger explanatory variables. Accordingly, research by Sanders et al. (2011c) shows that the intention of less-educated people to participate in education or training depends in part on the support they receive from coworkers and management. They influence a climate or culture of learning in which participation in education or training is valued. Therefore, it is not personal factors, such as education or motivation alone, that lead workers to focus on development, but environmental factors also play an important role. Van Loo et al. (2001) already distinguished between willingness and ability to participate in education or training

activities. These two aspects are important in promoting development among workers with fragile employability. In part II of this contribution we provide some Dutch examples of interventions offered on the development route.

11.2.2 Mobility Route to Sustainable Employability

The second route to sustainable employability is mobility. Unlike the development route, mobility involves adaptation on the part of both the person and the work itself. It could be said that a worker, an employer, or both, make adjustments towards changing the job, or finding a different one, (mobility) within or outside the current organization. This route assumes, for example, voluntary internal or external mobility, as a way of sidestepping a misfit with the current job, and of pursuing a new fit. Self-direction in a career is oriented towards taking individual initiative for career activities that lead to the achievement of career goals. Examples of these activities include networks, labour market orientation and self-presentation. 'The influencing of learning and career processes implies that workers actively think about and deal with their learning and with their career, that they take initiative for learning and career activities, and that they are able to overcome obstacles' (Raemdonck 2006). Outplacement programmes, employability policy and job-to-job mobility are typical activities in the mobility route. The difference with the development route is the predominance of a transition to a different job, department, organization, or industry, in response to the threat of reduced work volume in the future. Workers therefore remain employable by having the capacities and motivation to change jobs, occupation, or industry. Employability or mobility policy is therefore oriented to preparing workers at an early stage for a different job inside or outside the organization. Ybema et al. (2009) investigated the influence of transition to a different job and a different employer on the assessment of the willingness and ability to continue working to age 65. They found no significant difference between the assessment made by workers before and after the transition. Nonetheless, the number of workers who underwent a transition and who claimed to be unable to continue working until age 65 declined more strongly than the number of those who did not undergo a transition (from 35 to 25 % versus from 31 to 26 %). After changing jobs or employer, older workers are therefore somewhat less pessimistic about their chances of being unable to continue working to age 65. However, the question remains as to whether this justifies concluding that mobility as such makes employability more sustainable.

The scale of voluntary mobility among older and less-educated workers is relatively modest (see for example Zwinkels et al. 2009; Sanders et al. 2011e). Nauta et al. (2005) had already shown in this respect that as workers age their assessment of their opportunities of finding an attractive new job with a different employer declines substantially. A lower educational level reinforces this effect. The mobility route is pursued only to a limited extent. However, in our view, this route does offer interesting opportunities for making employability more sustainable, especially

when different types of mobility are considered. In part II of this contribution we provide some Dutch examples of interventions offered on the mobility route (for instance combining multiple jobs).

11.2.3 Job Redesign Route to Sustainable Employability

The third route (job redesign) involves adjustments in the current job to align it better with the worker's needs, strengths and capacities, where a misfit is likely to occur. The adjustments may be either downward, in which the job is trimmed back ('cushioning'), or upward ('utilization'), in which the job is actually made more challenging.

While keeping reduced requirements in line with the reduced capacities, in an attempt to unburden the worker, cushioning carries a risk of trimming away a feature of the job that they considered important. Taking the 'task redesign' route to sustainable employability should argue for adjusting the work to the worker in the form of experimenting with different tasks, or different ways of working, that ensure that the work continues to match the worker's characteristics: making better use of what a worker is willing and able to do.

It may also involve negotiating different conditions of employment that better match the changing needs, strengths and capacities of the worker concerned. Recent research into job crafting (Wrzesniewski and Dutton 2001; Leana et al. 2010), or idiosyncratic deals (I-deals; Rousseau 2005), reveal a tendency in thinking towards individual adjustments that workers and their employers make in their task design or conditions of employment in order to remain sustainably employable. A utilization route to sustainable employability envisages better utilization of workers' qualities in order to keep the current job interesting and challenging (ergo prevent the mechanism of skills becoming obsolete), while also preserving the motivation for the work (ergo prevent the mechanism of motivation eroding). The measures concerned give more attention to un- or underutilized strengths, or to new strengths acquired through experience, and to workers' specific needs and motives. Measures may be directed at changes in the current task design (job enlargement, job enrichment, changing role) or workday design (independent task planning, flexible rostering). Therefore, less manipulation of personal development is involved, and more of the work itself, to bring it into line with what workers are willing and able to do. Armstrong-Stassen and Ursel (2009) consider in this case that personal career development is distinct from job development, which means making adjustments in the current package of duties.

For older workers, stagnation in job development, where the routine nature of the current work is accompanied by a loss of meaning and challenge, is an important predictor of job dissatisfaction, and more important than the lack of vertical career development (promotion). Kooij (2010) asserts that this argues for a sharper focus on utilization measures as a route to sustainable employability. Ybema et al. (2009) find moreover that flexibility in structuring a worker's own working hours (workday design; Elsbach and Hargadon 2006) has an important effect on the assessment of their own sustainable employability (capable of working to age 65). Rau and Adams

(2005) show, in an experiment with various recruitment texts, that older workers are more likely to apply for a job that combines mentoring duties with opportunities for flexible working hours. This illustrates a preference among older workers for different types of tasks and flexibility in working hours.

Compared with a mobility strategy, in which work of a different nature and flexible working hours can be obtained in a different job inside or outside the organization, a utilization strategy focuses instead on the current position. An additional advantage is that the organization and the workers lose neither the knowledge and experience nor the internal and external networks that have been built up. A utilization strategy is therefore oriented to job development and job redesign with the goal of productively, healthily and sustainably embedding the workers in the current job. Part II contains some Dutch examples of interventions offered on the job redesign route (for instance job crafting).

11.3 Sustaining Employability, the Dutch Case

11.3.1 *Mechanisms of Skills Obsolescence in the Netherlands*

In a recent report on skills obsolescence in the Netherlands Sanders and Kraan (2013) show that all different types of skills obsolescence are reported in the Netherlands. Table 11.1 shows some of the results from their study. Approximately 26 % of all Dutch workers aged 30–55 experience one or more types of skills obsolescence. 26 % experiences technical skills obsolescence and 20 % experiences economical skills obsolescence. Low educated workers in the Netherlands appear to experience a higher level of skills obsolescence than higher educated workers. This goes for economical, technical and perspectivistic skills obsolescence. Possible explanations for this are that lower educated workers generally work in physically straining jobs. They will therefore experience more ‘wear’ than higher educated workers. This is also reflected in the fact that people working in ‘physical’ jobs, such as construction, building, assembling, cooking, cleaning, painting and loading experience more ‘wear’ than people in administrative jobs.

From analyses on a different data source, namely the STREAM panel study among Dutch workers aged 45–64, Sanders and Kraan (2013) also conclude that approximately 25 % of all workers aged 45–64 experience ‘atrophy’. They say they use certain knowledge and skills insufficiently, or not at all, giving them a sense of losing this knowledge and skills. This confirms the experience of the mechanism of technical skills obsolescence. Also, 43 % reports having knowledge and skills that they no longer need because of changes in their work, triggering the mechanism of economic (job-specific) skills obsolescence.

Ybema et al. (2011b) use the STREAM data to show that in the Netherlands:

- more skills obsolescence corresponds with lower workability;
- workers with more skills obsolescence are less likely to work with pleasure; and
- more skills obsolescence corresponds with less vitality.

Table 11.1 Perceived skills obsolescence by Dutch employees (30–54 years), 2011

		Technical (%)	Perspectivistic (%)	Economical (%)
Total		26	16	20
Age group	30–34 years	24	19	20
	35–39 years	28	17	26 ▲
	40–44 years	27	17	17
	45–49 years	23	19	19
	50–54 years	31	11 ▽	19
Education level	Low	31 △	24 ▲	25 △
	Intermediate	28	15	20
	Higher	23 ▼	13 ▽	19
Gender	Male	25	17	21
	Female	29	15	19
Type of work	Management	27	11 ▽	18
	Working with people (other than coworkers)	28	16	21
	Working with text and numbers	18 ▼	15	17 ▽
	Working with physical objects and materials	38 ▲	22 ▲	26 ▲

Source: Pilot-survey on Skills Obsolescence among Ageing Workers, see: Kraan and Cedefop (2012)

Percentages are tested using Pearson Chi-square tests

▲/▼: Significant ($p < 0.05$) and relevant difference (Cohen's $d > 0.20$)

△/▽: Significant ($p < 0.05$), but small difference ($0.10 < \text{Cohen's } d < 0.20$)

The Netherlands Employers Work Survey: (Oeij et al. 2011), also contains questions on whether employers perceive the mechanism of skills obsolescence among their workers. These data show that one in five employers reports that ‘workers can no longer perform their tasks optimally because of reduced physical or mental workload capacity’ (‘technical skills obsolescence’-mechanism). Also, one in five employers state that this is actually a problem demanding immediate attention. Technical skills obsolescence is especially a problem in the education sector, where one in three employers experience the mechanism of technical skills obsolescence among employees (33 %).

Adding to these results, TNO investigated occupations and sectors in which workers’ employability is relatively fragile. Explicit attention was paid to risks of skills obsolescence in their study as well. Besides that, attention was also given to other factors influencing worker employability fragility, such as a lack of basic qualifications, outflow figures and risk-increasing factors, such as an unstable employment relationship (small and temporary contracts) and below-average participation in post-initial education (or a little use of the development route to sustainable employability). Based on all these criteria, cooks, waiters, buffet assistants, concierges, cleaners and others can be included in the groups with relatively fragile employability. There are also some groups of workers who have to be included in

the groups with fragile employability despite possessing a basic qualification, such as the printers and finishers in the graphical industry. This occupational group faces such a short cycle of technological renewal that skills ‘degrade’ relatively rapidly. Further this occupational group has a relatively high average age and long lengths of service, increasing the risk of concentrated sector-specific and occupation-specific experience. This experience has limited value on the *external* labour market (which is to say outside the graphical industry). We also observe a high degree of perceived psychosocial burden, burnout and back problems, and accordingly an increased risk of physical and mental wear. Other occupational groups that deserve attention in connection with a fragile employability, other than for a lack of basic qualification, are care workers for older people and children, home helps and nursing auxiliaries. Shopkeepers, shop assistants and sales staff, loaders, unloaders, packers, and earthwork and crane operators also have relatively fragile employability.

These groups may therefore exhibit: (1) a relatively large risk of outflow to unemployment, non-participation, or benefit under the Work and Income (Capacity for Work) Act (fragile employability); (2) an above-average risk of various types of skills obsolescence (fragile employability); and (3) below-average participation in post-initial education in 2007, 2008, or 2009 (hardly taking the development route to sustainable employability so far).

11.3.2 Mechanisms of Motivation Erosion in the Netherlands

STREAM Ybema et al. (2011a), the National Working Conditions Survey Koppes et al. (2011) and the Global Working Conditions Survey that were conducted in 2010 included questions about the value that older workers attach to several intrinsic, extrinsic and social aspects of work. Analyses of the first STREAM measurement from 2010 by Gründemann et al. (2014) clarify how educational background and age (of people aged 45–64) relate to differences in work needs.

Table 11.2 shows that there are only limited differences across the various age groups in the value people attach to elements of work. Only for learning and growth opportunities was conspicuously more importance attached by the ‘youngest’ category of workers, aged between 45 and 49, compared with workers aged 50 or above. Looking at educational level, the pattern that emerges is consistent with earlier findings. Intrinsic aspects of work (interesting work and learning and growth opportunities) are valued significantly higher by highly educated than by less-educated people.

Less-educated people actually value extrinsic aspects of work, such as high income and job security, more than highly educated people. Regarding the social aspects of work (such as atmosphere and having a good manager), we see no difference between educational levels, which confirms the findings of Van den Broeck et al. (2011).

Table 11.2 Mean value given to aspects of work by age and educational level ('work motives')

Work values	Age group				Educational level		
	45–49	50–54	55–59	60–64	Low	Medium	High
<i>N</i> :	3.001	3.000	3.492	2.556	3.279	4.680	4.090
Interesting work	3.53	3.50	3.45	3.44	3.30 ▼	3.45	3.65 ▲
Learning and growth opportunities	2.96 ▲	2.86	2.70	2.67	2.61 ▼	2.80	2.95 ▲
Independence	3.48	3.46	3.45	3.47	3.41	3.45	3.52
High income	3.29	3.31	3.32	3.25	3.44 ▲	3.31	3.16 ▼
High job security	3.46	3.51	3.54	3.38	3.62 ▲	3.52	3.32 ▼
Pleasant atmosphere	3.73	3.74	3.73	3.70	3.76	3.74	3.69
Good manager	3.45	3.48	3.50	3.48	3.55	3.49	3.40
Appreciation	3.52	3.49	3.48	3.42	3.48	3.49	3.48

Source: STREAM (2010)

It has now been established that work motives can differ between individuals and that the work motives can change over time. Dorenbosch et al. (2011) investigated how employers and workers can jointly help to ensure that the work has and retains elements that motivate workers, among 16,000 Dutch workers (Netherlands Working Conditions Survey; Koppes et al. 2011). This study found that less-educated workers are generally no more or less satisfied with their job than highly educated workers. They also show that the absence of valued work elements (intrinsic, extrinsic and social) has a strong positive relationship with job dissatisfaction. Regardless of educational level, the absence of valued work elements ('work motives') leads to greater job dissatisfaction.

Finally, a recent study by Sanders et al. (2013) shows the interrelationship between motivation erosion and perceived skills obsolescence among older workers. Workers whose motivation drops are shown to experience more skills obsolescence and workers who experience more skills obsolescence in turn become demotivated.

These findings substantiate the importance of attending to what this contribution refers to as the mechanism of motivation erosion; the emergence of a misfit between what a worker would like and what the work provides must be avoided in order to make employability more sustainable. More specific analyses by Dorenbosch et al. (2011) reveal that dissatisfaction with income and high job demands are the main determinants of job dissatisfaction for less-educated workers, whereas for more highly educated people the variation in the work and career opportunities appear to be more important. This is consistent with Warr's (2008) findings and those of Gründemann et al. (2014), and points to the importance of giving specific attention to less-educated people in studying and combating motivation erosion.

Referring to the Global Working Conditions Survey 2010 (Oeij et al. 2011), Dorenbosch et al. (2012) investigated how much attention Dutch *employers* give

Table 11.3 Available scope for individual arrangements in organizations ($N=3,427$)

	Available scope for individual arrangements for income	Available scope for individual arrangements for working hours	Available scope for individual arrangements for development and training
<i>Personnel characteristics</i>			
Age (% below age 25 = reference)			
% Workers aged 25–44	0.00	–0.07**	–0.09**
% Workers aged 45 and over	–0.05	–0.04	–0.09**
Education (% low educational level = reference)			
% Medium educational level	0.07***	0.03	0.12***
% Highly educated	0.07**	0.14***	0.16***

Source: Global Working Conditions Survey (2010)

* $p < .05$, ** $p < .01$, *** $p < .0001$

to workers' educational level and age in their HR policy. Table 11.3 summarizes the results, and in this sense also provides an initial answer to how much employers, consciously or otherwise, contribute to the mechanism of motivation erosion by insufficiently utilizing the available scope for individualized conditions of employment.

The table shows that the higher the proportion of older workers (% aged 45 and above) in firms, the less scope employers report for individual arrangements for growth and development compared with firms that employ younger workers. Second, the table shows that the higher the proportion of highly educated workers in an organization, the more scope there is for individual arrangements in all three areas. The results confirm the importance of attending to individual arrangements for preventing erosion in work motivation, as well as for shedding light on how much this scope is utilized. However, the results given in the table also raise questions. For example, it is important to know why firms with relatively many less-educated workers should provide less scope, and whether that actually has anything to do with the presence of these less-educated workers. Other as yet unanswered questions relate to how much the available scope for individual arrangements for the 'satisfaction' of work needs, and the extent to which that scope is utilized, influence the sustainability of a person's employability.

The analyses show that there is a significant number of Dutch workers that have a 'fragile' employability. We continue by describing the availability of the three routes to sustaining this fragile employability. First we look at the level at which employers actually accommodate workers in taking the routes. Next, for each of these three routes, we showcase some TNO projects that are currently run in the Netherlands, aimed at better accommodating employees taking the different routes.

11.3.3 *Do Dutch Employers Accommodate Employees on Their Route to Sustainable Employability*

A final question, is the question “how much use do employers make of the three routes toward sustainable employability”. The answer can be obtained from the Netherlands Employer Work Survey data for 2010, as presented in Table 11.4. The information requested was about the provisions employers had in place to enable workers to continue to work for longer. The measures were categorized into the three different routes for making employability more sustainable.

Overall, the main measures that employers take for their ageing workers appear to be those that provide a cushion, such as shorter working hours, or extra days off. In view of the number of available routes, only a restricted arsenal is being deployed. One possible reason is that the image surrounding older people leads employers to have less of an eye for opportunities for development and utilization than for cushioning measures. Our main focus in this contribution is therefore on the opportunities presented by routes other than cushioning. An important related starting point is that both less-educated and highly educated workers can themselves be motivated to some extent to head off person-job misfits.

Table 11.4 ‘Employers’ routes’ to making employability more sustainable

	<i>N = 5.518 %</i>
<i>Development route</i>	
Promoting education/course participation	6
Promoting workers’ health	4
<i>Mobility route</i>	
Career and/or performance interviews	10
Retraining for different job/function	2
<i>Job redesign route (challenge)</i>	
Individual arrangements (for working hours)	16
Workplace adaptation	8
Job enlargement/job rotation	4
<i>Job redesign route (cushioning)</i>	
Extra days off	25
Partial early retirement	11
Workload reduction	11
Exemption from irregular and shift work	6
Lower income/job level (‘demotion’)	2

Source: Netherlands Employer Work Survey (2010)

Route 1: Development (Self Directed Learning with Management and Co-worker Support)

In the ‘Vakman Nieuwe Stijl’ project in 2011, TNO, P3Transfer and FNV Formaat drew up a list of the skills and personal characteristics that skilled workers of the twenty-first century will need in order to shape their own development and that of their discipline (i.e. to take the ‘development route’) and of the most appropriate related ‘forms of learning’ and ‘learning environment’ (Sanders et al. 2012). The foremost skills are those for self-directed learning (self-knowledge, self-awareness, the ability to make strategic choices, reflection, interaction with the environment and practical skills). This translates to the working environment, which provides direction, freedom and support to workers who wish to take the development route to sustainable employability.

Promote learning culture

Experience with promoting a learning culture in the fruit and vegetable sector in 2011 yielded a multistep plan for this purpose in small and medium-sized enterprises (Keijzer et al. 2012). The multistep plan for setting up a learning culture was developed in firms with a relatively large number of less-educated people, and has attracted many favourable reactions. The multistep plan was rolled out more widely in 2012.

Involve workers in their own development

In recent years TNO has carried out the ‘Leren en Werken Combineren (combine learning and working)’ project together with Philips, DSW Stadspark and Alliander. The research demonstrates the importance of both personal and contextual aspects in helping to motivate less-educated people to participate in education, and of aspects that help lead to this motivation actually being converted into training activities (see also: Hazelzet et al. 2012; Damen et al. 2013). ‘CareerSkills’, which was developed in 2010 and 2011 in the light of this knowledge, jointly explored, utilized, or resolved less-educated workers’ learning needs and obstacles to learning (Akkermans 2013).

Route 2: Mobility and Job-to-Job Transition: Multiple Jobs

TNO is currently investigating the development of knowledge on two ‘new’ interventions with the potential to make employability more sustainable. These are *multiple jobs (hybrid jobs)* (Huiskamp et al. 2011; Dorenbosch et al. 2013; Sanders et al. 2013a; Dorenbosch 2014), where Two or more

(continued)

small-scale jobs are performed in parallel, and *development jobs*, where there is a logical progression through jobs in the sense of achieving career development, and therefore of making employability more sustainable. We categorize these measures under ‘mobility interventions’, and therefore under the ‘mobility route’.

The interventions would appear to be particularly well-suited to workers with fragile employability. It was established earlier, for example, that less-educated people are rarely mobile at their own initiative, even if they are dissatisfied. Only conflicts with managers and coworkers will ‘push’ less-educated people to change jobs. When less-educated people become mobile, it therefore tends to be forced rather than voluntary. Furthermore, when less-educated people become mobile voluntarily, it is mainly on the internal labour market. As yet there are therefore few firm reference points for interventions that promote this voluntary mobility of labour among less-educated people.

Earlier research by TNO (Dorenbosch and Sanders 2010) already showed SME employers not to be averse to thinking about joint employment arrangements, in which a worker has a contract with several employers. For workers, these arrangements create full-time employment divided over several employers on a seasonal basis, or on the basis of working hours, or job content, thereby ‘spreading the risks’ for both employer and worker, and making employability more sustainable.

Route 3: Enable Workers to Redesign Tasks Themselves: Job Crafting

Job crafting is based on the principle that workers themselves consciously (and sometimes less consciously) make adjustments to job content and performance, bringing the work into line with changing needs, strengths and cognitive or physical capacities (Wrzesniewski and Dutton 2001).

TNO investigated the promotion of sustainable employability by means of job redesign among less-educated workers in three pilots (Dorenbosch et al. 2011). With small-scale interventions it was investigated whether better and different utilization of the task space on the part of gardeners, geriatric nursing assistants and street wardens could benefit workers in terms of a tenable and more sustainable D-A or S-V fit with the work. Do workers do more job crafting when they are given more freedom to do so in the planning of tasks, or when the awareness of and ways of dealing with a foreseeable reduced match are raised in a training course? And does this have a positive effect on employability in their own job, in terms of more challenge and meaning and less health risk?

This research revealed, for example, that workers in the same job context exhibited a great diversity in health and motivation risks that could in due

(continued)

course interfere with employability. It also appears that when workers formulate their own actions to deal with the risks, there is a great diversity in the proposals put forward for how they themselves can best ‘massage’ their job to reduce the employability risks.

One important conclusion is that ‘job crafting’ cannot yet be taken for granted merely by providing the freedom for it. Workers have to be aware of the importance of fostering a good fit between the job and the worker. The methodology developed by TNO to support job crafting (‘Craftwerk’), is compatible with the less-educated target group. New intervention tracks are now being carried out within government and special education (Dorenbosch 2014).

11.4 Conclusion

This contribution defined sustainable employability as a: ‘constant match between what a worker is able and willing to do and what the work demands and provides’; a dynamic person-job fit. We then showed that employability can become fragile as a consequence of two mechanisms: skills obsolescence and motivation erosion. The skills obsolescence mechanism implies the emergence of a misfit between the skills required for the work and those that a worker possesses. The misfit may involve physical capacities besides knowledge and skills. The mechanism of motivation erosion implies the emergence of a misfit between what motivates a worker and what the job provides. We refer to various studies that show that workers and employers encounter both mechanisms and show such for the Netherlands in part II of this contribution.

The conclusions regarding skills obsolescence in the Netherlands are that:

- 40 % of workers over 45 state that they are no longer using certain knowledge and skills, which is giving them a sense of losing their knowledge and skills (‘atrophy’);
- likewise, 40 % of workers over 45 state that they possess knowledge and skills that are no longer needed because of changes in the job (‘job-specific skills obsolescence’);
- 20 % of employers state that they have observed a decline in the physical and mental workload capacity of their workers (‘wear’);
- skills obsolescence is accompanied by lower ‘workability’ and less vitality;
- people with more skills obsolescence are less likely to be working for their pleasure.

The conclusions regarding motivation erosion in the Netherlands are that:

- educational level plays a more important part than age in motivation erosion;
- employers with a relatively large proportion of more highly educated workers provide individual arrangements for working hours, income and development

and training more often than those with a relatively large number of less-educated workers;

- older workers want to stop working sooner if they are offered no opportunities for flexible working hours.

We are in favour of making employability more sustainable through targeted ‘maintenance’ of skills and motivation, in which we identify three ‘sustainability routes’: development, design and mobility.

The *development route* is concerned with education and training, centred on formal and informal learning in each life phase (‘lifelong learning’). The development route is mainly concerned with changing the worker’s skills. Interventions in the development route could take the form of training courses or workshops, but other possible examples include promoting a learning culture, or providing individualized learning solutions.

The *redesign route* to sustainable employability is concerned with the optimum utilization of existing human capital through the smart design and redesign of jobs, careers, duties and work processes. The redesign route is concerned with changing characteristics of the work. Interventions in the redesign route include job crafting (defining your own duties) and independent rostering.

The *mobility route* is concerned with allocating or reallocating human capital in the organization (internal) and on the labour market (external) so as to contribute to better utilization. In that case it usually involves a change of both the worker’s skills and the characteristics of the work. The interventions in the mobility route include all forms of internal and external mobility, and gradations thereof, such as in combination jobs.

Development, design and mobility are routes to a sustainable relationship between people and work, and therefore to ‘sustainable employability’. The route likely to be most fruitful for a given person depends on why that person’s employability is fragile. An open dialogue within the employment relationship is of great importance in obtaining a good match between worker and work. In this dialogue the employer and the worker are able to make the right choice of route or a combination of routes. For lower educated this requires emancipatory action.

For the HR discipline, making employability more sustainable means that the M in HRM stands more for Maintenance than for Management. The maintenance of skills and motivation becomes the essence of the discipline. In the interests of that maintenance, the HR discipline must help steer, and, more in particular, give regularity to, the dialogue between workers and managers. This is with a view to them entering into ‘maintenance contracts’, setting down the sustainability route to be taken, actions or interventions involved, and how the employer and worker can support each other. The contracts do not have to be in the form of physical documents. They are actually psychological maintenance contracts between workers and employers, with the implicit agreement to pursue sustainable employability for the labour process in the widest sense. Sustainable employability is not in the unilateral interest of either workers or employers. It is an economic necessity and a public interest.

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Chapter 12

Poor Health as Cause and Consequence of Prolonged Unemployment: Mechanisms, Interventions, and Policy Recommendations

Alex Burdorf and Merel Schuring

12.1 Introduction

The presence of socioeconomic inequalities in health has been widely acknowledged. Lower education, unskilled labour and low income are associated with higher mortality and morbidity (Marmot et al. 1991). These health disparities are present in many high-income countries and have been persistently present in the past 50 years (Mackenbach 2012). In the past decade, unemployment as an important determinant of health inequalities has received growing attention, since unemployed persons often have a higher prevalence of illness and disability (Bartley et al. 2004) and also a higher risk of mortality (Lundin et al. 2010). This chapter will present some descriptive information on the role of unemployment in health disparities, before discussing the principal mechanisms underlying the associations between unemployment and poor health. Subsequently, intervention programmes will be described that have supported unemployed persons with health problems to re-enter paid employment. The consequences for policies to protect workers with health problems against exclusion from the labour market will be discussed. The chapter will conclude with recommendation for research, practice, and policy.

From the 1960s onwards, various publications have reported that unemployed persons have an increased morbidity and mortality. In 1993, a review already concluded that unemployed men had lower psychological well-being and suffered more often from depression and anxiety. They were also more likely to seek medical care and unhealthy behaviours, such as smoking and high alcohol use, were also more prevalent (Wilson and Walker 1993). However, most of these studies simply reported associations between unemployment and morbidity and did not differentiate between unemployment as cause or as consequence of ill health and also were not

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able to disentangle whether unemployment is a structural determinant of health inequalities or a mediating factor between low education and ill health.

A recent meta-analysis on longitudinal studies with long follow-up periods showed that unemployment was associated with an increased mortality risk for those with unemployment periods in their early and middle careers, but less for those in their late career. Among men with a period of unemployment the risk of death was increased by 1.95 among those under the age of 40 years, and decreased subsequently to 1.17 among men above 50 years. Among women these effects were slightly lower. In some studies in this meta-analysis it was possible to adjust for health-related behaviours and this reduced the overall effect of unemployment on all-cause mortality by 24 %. This supports the hypothesis that individuals cope with unemployment stress by changing their consumption patterns in unhealthy ways. The modest mediating effect of health behaviours only partly explained the influence of unemployment on mortality (Roelfs et al. 2011). Although the evidence presented in this review that the pathway from unemployment to mortality is consistent with a causal association, this meta-analysis could not adjust for health status prior to unemployment. Hence, it cannot be discarded that the causal mechanism could be that ill health at younger age leads to periods of unemployment and increased mortality in later life, suggesting that unemployment is only a mediating factor between ill health at younger age and mortality at older age rather than a structural determinant of mortality.

Indirect evidence for the potential impact of unemployment on mortality is also presented in a comparison of neighbourhood unemployment and mortality in six countries. Three prospective cohort studies and three population-based register studies consistently showed that neighbourhood unemployment rates were associated with all-cause mortality, after adjustment for age, education, and occupation at the individual level. Among men living in neighbourhoods with the highest compared with the lowest unemployment rates was associated with increased hazards of mortality (14–46 %), and among women similar associations were found (12–63 %) (van Lenthe et al. 2005).

The descriptive information above clearly suggests that there is a strong association between unemployment and poor health. However, further scrutiny of available evidence on underlying mechanisms of associations between unemployment and poor health is necessary in order to fully understand the causal patterns and its consequences for development of appropriate interventions to support unemployed persons with health problems to re-enter paid employment and introduction of national policies that will protect workers with health problems against exclusion from the labour market.

12.2 Selection and Causation

The inequalities in health between unemployed and employed persons may be explained by two principal mechanisms: selection and causation. The selection hypothesis states that poor health will increase the probability of unemployment,

whereas the causation hypothesis proposes that unemployment may cause poor health.

Selection can act through two different pathways: (1) workers with a poor health will be more likely to be displaced from the labour market, and (2) unemployed persons with health problems may experience less opportunities to (re-)enter the workforce. Evidence for both pathways in the selection process is presented in several studies. For example, in a recent prospective study with 10 years follow-up in a representative sample of the Dutch working population ($n=15,152$) self-rated poor health increased the likelihood of labour force exit into unemployment (hazard ratio (HR)=1.89), disability benefits (HR=6.39), and early retirement (HR=1.20). In addition, workers with ill health at baseline were less likely to return to work after a period of unemployment (HR=0.75) or disability benefits (HR=0.62) during the follow-up of 10 years. Hence, it was demonstrated that ill health is an important determinant for not entering and maintaining paid employment, advocating policies to protect workers with health problems against exclusion from the labour force, especially among workers with lower education (Schuring et al. 2013).

In the Survey of Health, Ageing, and Retirement in Europe (SHARE) it was shown that among older workers in 11 European countries during a 4 year follow-up period, poor health was an important risk factor for disability benefits (HR=3.90) and had a modest influence on displacement from paid employment through unemployment (HR=1.21) and early retirement (HR=1.17). Interestingly, lack of physical activity was an independent risk factor for disability benefits (HR=3.05) and unemployment (HR=1.84), but other health behaviours, such as excessive alcohol intake and obesity, did not contribute statistically significantly to any exit route. Among work-related factors available, perceived lack of job control was consistently a risk factor for disability benefits, unemployment, and early retirement (HR 1.30–1.77). This study illustrates that poor health, health behaviours, and work-related factors may all play a role in exit from paid employment, but that their relative importance will differ by exit route (Robroek et al. 2013).

Although most evidence for the selection mechanism stems from longitudinal studies in European countries, most notable United Kingdom, Norway, Finland, and the Netherlands, this evidence is mirrored in studies from the United States. In the US-based Panel Study of Income Dynamics it was reported that labour market exit was influenced by ill health, but differently depending on age, gender, education, and race. The authors suggested that these patterns may reflect differential access to social security benefits (McDonough and Amick 2001), which has also been suggested in a comparison of six regions across the world with different welfare regimes (Kim et al. 2012).

The causation mechanism also can act through two different pathways: (1) involuntary loss of paid employment may have a negative influence on health, whereas (2) gaining paid employment after being out of the workforce for some time may have a positive influence on health. An illustration of the causation mechanism is the longitudinal study with 8 years follow-up among British households ($n=5,092$), whereby transitions from paid employment to either unemployment or longterm sick leave were associated with increased psychological distress among both men and women and these effects were felt most strongly within 6 month of

the transition. Conversely, transitions from non-employment to paid employment resulted in an improvement in mental health (Thomas et al. 2005). A review of 16 longitudinal studies on mental health effects of unemployment showed that loss of employment affected mental health, but also that gaining employment improved mental health (Murphy and Athanasou 1999). A recent overview concluded that re-employment will result in clear benefits in psychological health and well-being and possibly also improvements in other aspects of health, although evidence was less available (Waddell and Burton 2006). The finding in a few studies that re-employment will improve self-perceived health has received too little attention in return to work and rehabilitation programmes, as most intervention studies have focused on labour force participation as primary outcome measure and not reported on improvements in health as the underlying cause of unemployment (Schuring et al. 2011). In Sect. 12.4 more details will be presented on how entering paid employment will improve self-perceived health.

The studies described above provide compelling evidence for the presence of both selection and causation mechanisms in the association between health and employment. This association is bidirectional and may be influenced by several socio-demographic, lifestyle and work-related factors. Detailed investigations are required to identify the most important determinants of selection and causation as first step towards development of effective interventions to support persons with health problems. In Sect. 12.6 we will present our recommendations for research in this area.

12.3 Selection: How Does Poor Health Influence Paid Employment?

It can be expected that the selection process will differ across sociodemographic groups, such as age, education, sex, and marital status, which are important for the social context of health and employment status. Another important consideration is how the impact of poor health on becoming and staying employed will be influenced by different social and labour market policies in European countries. Empirical evidence on the latter is very scarce, but a recent study attempted to demonstrate its importance. Individual records from the ongoing panel survey Statistics on Income and Living Conditions (SILC) across 25 European countries were linked with national indicators for welfare arrangements. This cross-sectional analysis suggested that the negative influence of a limiting longstanding illness on having paid employment was reduced considerably by national spending on active labour market policies and welfare generosity, whereas income inequality and employment protection had little influence (van der Wel et al. 2011).

Against this background, an international comparative study was conducted to investigate the particular role of poor health in the selection process into paid employment in different socioeconomic groups in 11 European countries (Schuring et al. 2007). Data were derived from five waves (1994–1998) of the European

Table 12.1 Multivariate models with different time windows of the influence of poor health on employment transitions among subjects from the European Household Panel Survey

	Years before entering paid employment (from non-employment)			
	1 year	2 years	3 years	4 years
	OR (95 % CI)	OR (95 % CI)	OR (95 % CI)	OR (95 % CI)
Poor health-women	0.4 (0.3–0.5)	0.4 (0.3–0.5)	0.6 (0.4–0.8)	0.5 (0.3–0.9)
Good health-women	0.6 (0.5–0.7)	0.6 (0.5–0.7)	0.5 (0.4–0.7)	0.7 (0.5–1.0)
Poor health-men	0.6 (0.4–0.7)	0.6 (0.5–0.7)	0.6 (0.4–0.8)	0.6 (0.4–1.1)
Good health-men	1	1	1	1

	Years before becoming unemployed (from paid employment)			
	1 year	2 years	3 years	4 years
	OR (95 % CI)	OR (95 % CI)	OR (95 % CI)	OR (95 % CI)
Poor health-low education	2.2 (1.8–2.6)	2.5 (2.0–3.1)	2.3 (1.6–3.4)	2.5 (1.6–3.9)
Good health-low education	1.9 (1.7–2.2)	1.9 (1.6–2.3)	2.2 (1.6–3.1)	2.2 (1.5–3.1)
Poor health-inter education	2.4 (2.0–2.9)	2.1 (1.7–2.6)	2.5 (1.7–3.7)	2.3 (1.5–3.5)
Good health-inter education	1.4 (1.2–1.6)	1.5 (1.2–1.8)	1.6 (1.2–2.3)	1.8 (1.3–2.6)
Poor health-high education	2.1 (1.6–2.6)	1.6 (1.2–2.2)	1.4 (0.8–2.4)	1.2 (0.7–2.3)
Good health-high education	1	1	1	1

OR odds ratio, 95 %, CI 95 % confidence interval

Community Household Panel (ECHP), a social survey among household members in countries of the European Union with a longitudinal design to describe the social dynamics in Europe. For the evaluation of determinants of transitions between non-employment and paid employment subjects aged between 16 and 65 years were selected, with available information on employment status and health status during at least three consecutive annual measurements. A cohort with 3 years of follow-up was created with two consecutive years before a possible employment transition between paid employment (working in a job for at least 15 h per week) and unemployment, early retirement, and taking care of household.

Table 12.1 shows the main results of interactions between poor health and socio-demographic factors. Among those persons without paid employment, women with poor health, men with poor health, and women with good health were significantly more likely to remain unemployed in the next year than men with good health (Odds ratio as measure of risk). This interaction was present up to 4 years before entering paid employment. Thus, health as selection mechanism was stronger among men than among women and persistently present over time. Among persons with paid employment poor health was a more important factor for becoming unemployed among workers with high education than those with lower education. The effect of poor health within the stratum of higher education became less strong in more distant years. Thus, health as selection mechanism was stronger with higher education and also among those with highest education a short-term rather than a long-term effect. The impact of chronic health problems was remarkably similar to a self-rated poor health.

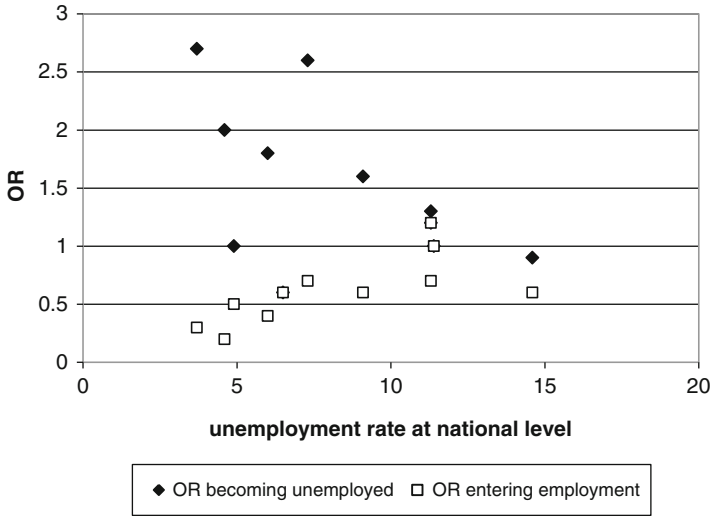


Fig. 12.1 The magnitude of the association between a self-rated poor health and becoming unemployed or entering paid employment (OR) against the national unemployment rate in 1998 among 11 European countries

The country-specific analysis demonstrated that the selection mechanisms differed among countries. Figure 12.1 illustrates that a lower unemployment rate at national level in 1998 was associated with larger effects of poor health on not entering employment and larger effects of poor health on becoming unemployed. This suggests that national social and labour market circumstances modify the selection process of poor health on paid employment. Two alternative explanations warrant future investigation with respect to policy and economic consequences. One, it may be hypothesised that in countries with a low national unemployment rate, health will strongly compete with other labour market factors in the process of entering or retaining paid employment. In these European countries with highest wealth, most persons will have access to the labour market and only for those with severe limitations, such as ill health or illiteracy, labour market opportunities are strongly affected. In contrast, in countries with high unemployment health is less important than other factors in determining employment status. The current study does not present indications whether economic wealth or active policies with regard to inclusive labour market and employment protection play an important role. The aforementioned study by Van der Wel and colleagues (2011), however, suggest that political decisions with regard to welfare generosity and active labour support systems may be important contextual factors in explaining the observation in Fig. 12.1. An additional analysis on the ECHP data showed that in countries with low unemployment ill health was a significant barrier to enter paid employment (Schuring et al. 2007), suggesting that the active labour support systems in Denmark, Germany, and the Netherlands do not seem to take into account ill health as an important factor to address in vocational rehabilitation.

Second, the observation may be partly due to the discriminatory power of the study, whereby a similar population-based estimation of the contribution of ill health to unemployment is much more difficult to demonstrate in countries with a high national unemployment rate, whereby many factors simultaneously determine labour opportunities for persons.

The results described above clearly support the existence of a health selection in the workforce as healthier people are more likely to become or remain employed than less healthy people. The study also points out that the selection process may depend on individual characteristics such as age, sex, and education, and on labour market and welfare regime characteristics, such as provisions for workers with health problems to remain engaged in paid employment.

12.4 Causation: How Does Unemployment Influence Poor Health?

The causation theory stipulates that unemployment per sé is a cause of poor health. Although formally not part of the causation theory, when causality is demonstrated, this theory must imply also that re-employment should improve health. The causation process of unemployment as cause for deterioration of health is well-established in various studies. Considerably less is known on how re-employment will impact health. The main message of the so-called Black report on the health of Britain's working-age population phrases that "Work, matched to one's knowledge and skills and undertaken in a safe, healthy environment, can reverse the harmful effects of prolonged sickness absence or long term unemployment, and promote health, well-being and prosperity" (Black 2008). Since transitions from paid employment to unemployment seem to increase psychological distress within 6 months (Thomas et al. 2005), it is important to gain better insight into the short-term positive effects of re-employment on health.

With this rationale in mind, a cohort study among long-term unemployed persons was conducted with repeated measurements of health and employment status over a 6 month period (Schuring et al. 2011). The study population consisted of persons on social security benefits who were capable of full-time employment and who were referred by the Employment Centre of the City of Rotterdam, The Netherlands, to one of the four re-employment training centres in the area for re-employment training. Some of the participants did have chronic health problems, but they were all declared fit enough to be capable of full-time employment after investigation by a physician, a psychologist, and an employment specialist. Health-related quality of life was measured with the 36-Item Short-Form Health Survey (SF-36), which presents eight dimensions: physical functioning, general health, mental health, bodily pain, social functioning, vitality, role limitation due to emotional health problems, and role limitation due to physical health problems.

The expected result was that indeed unemployed participants with a poor health at baseline were less likely to return to paid employment during follow-up. All

Table 12.2 The influence of re-employment on the changes in the eight dimensions of health measured by the SF-36 health questionnaire among the long-term unemployed persons during a follow-up period of 6 months

Dimension of health	Effect of re-employment on change in health score	Effect size ^a
Physical functioning	7.0	0.18
General health	9.2	0.11
Mental health	11.3	0.20
Bodily pain	11.0	0.66
Social functioning	14.2	0.32
Vitality	7.8	0.26
Role limitation due to emotional health problems	22.7	0.46
role limitation due to physical health problems	20.0	0.33

^aEffect size was calculated as ratio of the absolute change over the pooled standard deviation of health scores at baseline and follow-up

dimensions of perceived health at baseline had an influence on the likelihood of becoming employed, except for mental health. Physical functioning had the strongest influence on the likelihood of becoming employed. Table 12.2 shows that those participants who started with paid employment during the 6 months follow-up period improved in all aspects of health. The largest relative improvements were observed for mental health, social functioning, and role limitations due to emotional or physical problems, whereas physical functioning showed the smallest relative improvement. Among participants who remained unemployed, their health status remained virtually unchanged during the 6 months follow-up period. Participation in a re-employment training was also not associated with change of health status. Interestingly, the effect size of re-employment (the change divided by the standard deviation) varied from 0.11 to 0.66, which compares very well with effect sizes reported in health promotion programmes (Schuring et al. 2011).

A recent study among a Dutch random sample of unemployed persons (n=4,308) corroborated these interesting findings. In a prospective study with 18 months follow-up among unemployed persons, receiving either unemployment benefits or social security benefits, quality of life, self-rated health, and employment status were measured every 6 months during follow up. Persons who started with paid employment during the follow-up period were more likely to improve towards good quality of life (OR=1.76) and good self-rated health (OR=2.88), compared with those persons who remained unemployed. Up to 6 months after re-employment, the likelihood of a good quality of life increased (Carrier et al. 2013).

These results provide evidence that work is indeed good for your health and, thus, work should be considered as an important part of health promotion programmes among unemployed persons. Public health measures are required to include persons with a poor health in the labour market and to prevent workers with ill health from dropping out of the workforce. In policies and programmes to reduce socioeconomic inequalities in health the provision of paid employment should play

a key role. In the next Sect. 12.5 several policy measures and evidence-based interventions will be presented that may contribute to this overall goal of achieving an inclusive labour market for persons with health problems.

12.5 Policy Measures and Interventions on Unemployed Persons with Health Problems

Given the importance of paid employment in health inequalities, insight into effective policies and interventions to support persons with chronic diseases to enter or maintain paid employment is highly needed. In a systematic review of 31 initiatives with an individual focus (improving an individual's employability or providing financial support in returning to work) and 11 policies with an environmental focus (directed at the employment environment or changing the behaviour of employers) in the United Kingdom, it was concluded that many evaluation studies suffered from selection bias into these programmes of more work-ready claimants. In addition, most programmes had very low awareness and take-up rates, making it unlikely that a population-level impact would be achieved even if effective for participants (Clayton et al. 2011).

Empirical evidence on the effectiveness of introduction of specific policy measures is completely absent, due to lack of quantitative studies of sufficient quality. A report on efforts within European countries noted large differences in return-to-work rates between countries and tentatively suggested that active labour-oriented policies in combination with compulsory legal instruments supported relatively high return rates to previous employers in certain countries (Grammenos 2003). This recommendation was later underpinned by the comparative study of Van der Wel et al. (2011), which showed that national spending on active labour market policies had a positive influence on paid employment among those with limiting long-standing illness. The report also strongly advocated coherence and coordination of national policies at different levels in order to overcome current obstacles whereby activities and regulations on education, social security, employment, and reintegration sometimes had contradictory goals that prevented disabled persons to take full advantage of the available schemes and programmes (Grammenos 2003).

Empirical evidence on the effectiveness of individually-oriented interventions is still lacking to a great extent, but there are several quantitative studies of high quality available. A systematic review on 11 randomised controlled trials evaluated the effectiveness of different programmes for persons with severe mental illness. Subjects in supported employment were more likely to enter paid employment than those who received prevocational training during follow-up (for example 34 % versus 12 %) and also earned more and worked more hours per month than those who had had prevocational training (Crowther et al. 2001). The most studied programme of supported employment is the individual placement and support approach (IPS), which emphasises rapid job search on the basis of patient preference, continued

support to patient and employer, and integrated treatment by a mental-health service. A recent evaluation study of IPS in six European countries confirmed these findings whereby IPS persons were engaged more often and longer in paid employment, were less likely to have dropped out, and had lower readmission to mental health care. Local unemployment rates accounted for a substantial amount of the heterogeneity in IPS effectiveness, reflecting the pattern observed for the importance of health selection across European countries (Burns et al. 2007).

While these reviews show that evidence for effectiveness of reintegration programmes for persons with chronic health problems, especially those with mental health problems, is accumulating, for many chronic disease the effectiveness of vocational rehabilitation programmes is unknown (Clayton et al. 2011). Hence, societies should not only invest in delivery of such programmes, but also provide the necessary research funding to investigate how and why particular programmes work better than others. This requires randomised controlled trials on cost-effectiveness of well-defined programmes as well as implementation studies on barriers and facilitators of uptake and adequate delivery of these programmes. Given the studies that have demonstrated that the selection process out of the workforce depends on individual characteristics such as age, sex, and education, and on labour market and welfare regime characteristics (see Sect. 12.3), there is a clear need to study cost-effectiveness in relation to specific sub-groups and crucial contextual factors such as local labour market and national social security schemes.

12.6 Challenges for Research and Practice

In our ageing societies, there is a clear need to increase work participation and sustain a productive workforce because of decreasing birth rates and increased life expectancy in most industrialized countries. Many countries are developing policies to stimulate labour force participation, particularly to encourage older workers to remain at work longer. The statutory retirement age has been raised to 67 and upwards in countries such as Denmark, Finland, Norway, The Netherlands, and United States, often relative to the year of birth. Since in many countries most workers still retire well below the official age for receiving an old-age pension, various social and economic policies have been enacted to postpone early retirement. For example, in the Netherlands the abolishment of tax deductibility of early retirement saving schemes and changes in collective labour agreements have pushed upwards the actual age of retirement from 61 years in 2006 to 63.5 years in 2012.

In this development of working longer at older age, workers with existing or emerging health problems are a vulnerable group. In order to develop successful interventions to reduce exit from the labour force, insight into the main determinants of exit from paid employment is needed. Poor health plays an important role in exit from paid employment, particularly due to disability pension and, to a lesser extent, unemployment. On the individual level, exit from paid employment will not only increase financial and social problems, it also contributes to experiencing

health problems. Lack of paid employment is an important determinant of inequalities in health in most societies.

The bi-directional influence of work and health (selection and causation) argues for an integrated approach of labour market organisations and health care providers to offer the best service available for persons with temporary or chronic health problems. In order to support sustainable employability of workers with chronic health problems three important challenges can be identified:

- research: develop an evidence-based approach whereby rehabilitation programmes are properly evaluated for their cost-effectiveness from labour market and health care perspective. International and national research programmes are highly needed with randomised controlled trials on cost-effectiveness of well-defined programmes. National research programmes should focus on (i) cost-effectiveness with as primary outcome measures both paid employment, health as well as medical consumption, and (ii) specific groups that benefit most from the intervention. International comparisons of similar programmes, for example the individual placement and support (IPS) approach, will present insight into the influence of important contextual factors, such as local labour market and social security generosity, for cost-effectiveness.
- policy: implement legislation, arrangements, and support schemes to make the workplace more ‘disability friendly’. Policy arrangements should empower workers with health problems to remain productive in their regular job or timely facilitates change of job towards less strenuous jobs with an appropriate balance between a person’s physical and mental capabilities and the physical and mental demands at work. In several countries, such as Denmark, the Netherlands, and Sweden, financial incentives to carry on working have been strengthened, programmes to improve employability of elderly workers were launched (e.g. stimulate part-time work while being on social benefits), and legislation that affected mobility in the labour market was changed.
- practice: provide timely and adequate vocational rehabilitation support for persons with chronic health problems. Vocational rehabilitation should integrate labour market support with required medical treatment and guidance and, hence, programmes and activities must be developed to ensure that current barriers between different domains can be tackled. The review by Clayton et al. (2011) on programmes in England showed that most programmes lack a sound theoretical rationale for content and mode of delivery. A governmental report in the Netherlands concluded that rehabilitation services could not demonstrated their added value for quicker return to paid employment (Hoff et al. 2003). It is imperative that the rehabilitation sector should adopt an evidence-based practice.

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Part V
Early Retirement or Job Retention

Chapter 13

Enhancing Career Management Preparedness and Mental Health

Jukka Vuori and Salla Toppinen-Tanner

13.1 Introduction

Employees are expected to keep themselves productive, healthy and motivated throughout their working career. In many developed countries they are also expected to continue their careers for longer. At the same time, unemployment rates in many countries are at relatively high levels and a growing proportion of employees seem to have difficulties keeping up with this development (Eurostat 2013). Many young workers also have difficulties entering a sustainable working career, as they attempt to build their personal lives and work life identities (Gangl 2002).

Today's unpredictable employment environment and frequent transformations in work organizations cause uncertainty, anxiety, stress, and symptoms of depression (Ferrie et al. 2005). Increased symptoms may in the long run lead to increases in the prevalence of depression (van de Leemput et al. 2013). For example, in Europe, depression has become a major reason for work disability pensions (Ahola et al. 2009; Sobocki et al. 2006).

These work life challenges underline the need for new conceptual frameworks for more sustainable working careers, emphasizing a life-long perspective (van der Heijden et al. 2008). As human capabilities and resources are not limitless, it would be useful to manage these valuable resources in a more enduring way throughout the life course (Hobfoll 1989; Riley and Riley 1994). Moreover, lives have become considerably longer during the last hundred years, and this offers new possibilities for finding feasible solutions for both longer careers and their sustainability.

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We will first look in more detail at the issues connected to creating more sustainable careers under the pressure of current work life demands, and how to better prepare people for the unpredictable employment environment. This aims not only for more productive working careers, but also for better motivation and mental health. Second, we will present case examples of group interventions aimed at enhancing career management preparedness and the mental health of employees in work organizations and of young employees returning to work after parental leave. Finally, we will discuss these case examples and try to look at their implications for research and development in promoting more sustainable working careers.

13.1.1 Changing Working Careers

Work has always been an inseparable part of human activity, and working careers can be understood in many ways. In addition to the more normative form of a working career as a sequence of job positions held by a person, a career also consists of changes in values and attitudes, motivation, and health during a person's work life course (Sears 1982). A sustainable working career would imply that one's working life stretches over most of one's adult life course and ideally constitutes a manageable and identifiable whole.

As the predictability of employment has declined for many workers due to widespread restructuring, downsizing and flexible employment strategies, employability and career resilience have become important goals for career management. In addition to traditional occupational transitions on the fringes of work life, for example the school-to-work transition or job loss and re-employment, career transitions also increasingly occur in changing work organizations. This development imposes additional challenges to individual employees, and their experiences of job security and well-being. The focal issues of career management inside work organizations involve not only career planning and employment issues, as in traditional occupational transitions, but also elements related to managing work and family conflicts and coping with insecurity during one's working career (Vuori et al. 2012). At the same time, it seems that traditional management practices regarding employees' careers have become less valuable for employees, as careers have become less continuous and predictable. The focal question now is whether employees are able to be sufficiently adaptive and proactive and take responsibility for their own career development in this changing environment (Lips-Wiersma and Hall 2007).

Recent discussion on working careers has also emphasized the need to intensify the productivity of careers. In many developed countries, the desired improvement in productivity has been tied with the extension of working careers, because this would also decrease the societal expenses related to longer retirement periods (Bongaarts 2004). This discussion is due to swiftly increasing global economic competition and rapid demographic changes, which means the aging of the available workforce and changes in modern working careers (van der Heijden et al. 2008).

During the last 100 years, healthy human lives have extended by over a decade, and this development is still continuing (Vaupel 2010). As a consequence, many aging societies are under financial pressure to raise retirement ages, because their economies are experiencing difficulties due to the increasing expenses caused by lengthening retirement periods (Ebbinghaus 2000). This has added to the demands imposed by societies on employees to work for longer. Among employees, this demand has had a contradictory reception: Some employees want to work for longer and others are opposed. These labor political pressures will probably continue in many developed countries for a long time, and employees will face this new challenge of working for longer. The life course perspective will be a key element in providing more sustainable career solutions to pressures from various life spheres (Demerouti et al. 2012; van der Heijden et al. 2008).

13.1.2 Life Course Perspective of Working Careers

Traditional conceptual working career frameworks tend to divide the life course into three consecutive phases. First comes the educational phase of childhood and youth. The second phase is the active work period, and the third comprises retirement years earned by long working years dedicated to society. This view of the working career has been called the age-differentiated view (Kahn 1994). In most countries, the structures of society and work life have developed in parallel with this age-differentiated societal structure and have created many of the current problems related to the management of working careers. The problems are typically related to transitions from one of these phases to another, such as from school to work or from work to retirement (Kahn 1994).

In contrast to the age-differentiated view of society, Riley and Riley (1994) have proposed an age-integrated view of society and working life. In an age-integrated society, education, active work and free time would not be three consecutive phases, but would exist parallel to each other, all three possibilities being available throughout the life course. This more flexible conception of the working career would also imply that careers should be viewed in a life course perspective. There has already been considerable development in both life-long learning and work-life balance areas.

In an age-integrated work life, employees could better manage their working career in a way that would take more account of their current life and career situation. This would open new possibilities for managing rapidly changing work life and working careers. At the same time, the longer time perspective would provide more flexible options for managing and enhancing competencies, target-orientation and the resources related to working careers (Hobfoll 1989; Riley and Riley 1994). However, although this opens up possibilities for more sustainable working careers, concrete development on this front has been slow.

13.1.3 Work, Career and Family Experiences and Depression

Disadvantageous work and career experiences have been shown in many studies to increase symptoms of depression and burnout among employees and thus to contribute to the prevalence of depression at work (Ahola et al. 2009; Clumeck et al. 2009; Rossi et al. 2009; Stansfeld and Candy 2006). A nationally representative study of Americans aged 15–54 showed that 18 % of those who were employed reported symptoms of mental health disorder in the previous month, mostly depressive symptoms (Harvard Medical School 2010). In Europe, the situation is similar, and incidence depends on the severity of symptoms (European Commission 2004). Depression has become an endemic cause of long sickness absences (Bültmann et al. 2006) and disability pensions (Mykletun et al. 2006). However, in addition to the fact that a growing number of depression-related early retirements create a serious threat to productivity in modern labor forces, this is only one part of the problem. The other and even bigger part is that depression and burnout also cause significant losses in productivity among employees still in the workforce (Adler et al. 2006; Dewa and McDaid 2011; Lerner and Henke 2008).

It has been estimated that of the societal cost of depression, 30–60 % is related to losses associated with decreased work productivity (Dewa and McDaid 2011; Greenberg et al. 2003). In comparison to other common health impairments, depression has the most detrimental effect on work performance and productivity, and other concurrent health problems further increase this harmful effect (Kessler et al. 2008). The resulting loss in working time due to reduced work performance has been estimated to account for about 27 working days per year, equaling about 10 % of annual work input (Kessler et al. 2006). Moreover, work stressors seem to further add to impaired work performance among those with elevated levels of depressive symptoms (Lerner et al. 2010). A focal work life stressor in the current unpredictable employment environment is job insecurity, with a wide range of detrimental health effects (László et al. 2010). Due to the prevalence of the problem, the prevention of depressive symptoms seems a crucial factor in the efforts to enhance work life productivity and longer careers.

There is also ample evidence showing that work-family conflict can be a significant source of stress, burnout and job dissatisfaction causing negative mental health consequences (Amstad et al. 2011; Michel et al. 2011). Parents with younger children usually experience more work-family conflict due to the high demands from family life (e.g. Eby et al. 2005). The issue of work-life balance is relevant across the whole working age as many employees, particularly women care for not only their children, but also their aging parents. In Europe these figures estimate around 50 % regarding employees with small children and 25 % of employees caring for their elderly parents or other close people (Eurofound 2012). Evidence shows that participation in both work and eldercare can lead to a number of negative consequences for the individual, such as work-family conflict and symptoms indicating decrease in mental health (see McCarthy et al. 2013). Organizational outcomes include increased absenteeism, missed wages and lost opportunities in one's career.

13.1.4 Coping with Career Experiences and Transitions

When external pressures on employees' working careers, such as organizational changes or layoffs, cause career changes, this often results in difficult decisions regarding one's future and possible new ways of coping. On the other hand, these kinds of changes may provide opportunities to resolve these questions in such a way that the outcomes suit the employee and further enhance their career and life goals.

Earlier research has demonstrated how cognitive behavior interventions, often based on concepts of self-efficacy, have shown beneficial outcomes in employee behavior, careers and mental health (Jané-Llopis et al. 2003). According to Bandura's (1986) influential theory of social learning, people actively shape and direct their own behavior and life sphere in a way that would most probably offer them success and well-being. According to this theory, people pursue this goal in their interaction with their environment and obtain positive feedback regarding their success. Hobfoll's (1989) conservation of resources theory introduces a more efficient strategy for optimizing success and well-being during a longer period of life. In this strategy, people strive to pursue and maintain personal characteristics and social circumstances (i.e. resources) that increase the likelihood of positive feedback from their environment in a longer time perspective. In the working career, these kinds of characteristics would comprise, for example, career and skills management, occupational self-esteem, health management, and the management of the work-life balance. Similarly, beneficial social circumstances would comprise a good position in work life, supportive family life and social networks, and healthy hobbies, among other social circumstances. These individual and social resources enhance coping during, for example, work life transitions and other external changes and prevent the emergence of stress, which could be harmful to health. The following section will examine in more detail one focal resource, i.e. preparedness for career management, which enhances coping during working career challenges and which can be used as a basis for career management interventions.

13.1.5 Preparedness for Career Management

Career management preparedness originally refers to a cognitive-motivational construct, which has two intertwined ingredients: career management self-efficacy and inoculation against setbacks (Vuori and Vinokur 2005; Vuori et al. 2012). Research has shown that when somebody is ready for a new behavior and thus feels high efficacy regarding the behavior, this best predicts that the new behavior will begin (Ajzen 1991; Bandura 1986). For example, good career management self-efficacy means that a person is confident in their abilities to manage their own career successfully. Career management self-efficacy comprises skills such as identifying one's own strengths and goals, internalizing the idea of life-long learning in one's behavior, taking advantage of one's own career-related social networks, and taking

care of one's own work ability and employability. Accordingly, if we strengthen employees' career management self-efficacy, we can expect that they can better manage their careers in their unpredictable work life, and actively aim to do so. Strong career management self-efficacy, even with good knowledge and motivation, may sometimes not be enough in a career situation that remains challenging for a longer period of time. Career setbacks, difficulties and barriers may weaken one's confidence in the success of one's behavior towards career goals. However, it is possible to prepare for setbacks.

The process of inoculation against setbacks is the other component of preparedness and is based on developing skills for anticipating setbacks and coping with them (Vinokur et al. 1995; Vuori and Vinokur 2005). Inoculation against setbacks can be strengthened by giving an employee experiences of mild setbacks and stress situations and providing them with opportunities to practice overcoming them (Meichenbaum 1985). This strengthens preparedness, resilience and coping in situations in which a person encounters real-life challenging setbacks and barriers. In the process of inoculation, an employee learns resourcefulness to proceed and realize their plan in uncertain circumstances without discouragement over minor setbacks. This is most likely to also increase the availability of future resources by providing confidence and feelings of accomplishment. Research has demonstrated that inoculation against setbacks is a focal tool in preventing symptoms of depression among workers (Vuori et al. 2005).

An employee who is confident with their career management skills, and is knowledge-wise and emotionally ready to deal with the setbacks that may be encountered in the career management process, is well prepared and motivationally ready to manage their career in an increasingly unpredictable career environment (Vuori and Vinokur 2005). This also provides opportunities for developing practical career management interventions for employees in work organizations to promote their career management and mental health.

13.1.6 Enhancing Preparedness

Employee's preparedness to manage their own career is a focal personal resource in a career situation in which there is considerable uncertainty about the results of one's own behavior, for example the consequences of choices in an organizational change (Sweeny et al. 2006; Vuori and Vinokur 2005). Recently, Lent (2013) also suggested that life-career preparedness, which is very similar to the career preparedness concept, could be highly useful, as careers have become more unpredictable. He defines career-life preparedness as "a healthy state of vigilance regarding threats to one's career well-being as well as alertness to resources and opportunities on which one can capitalize" (Lent 2013). In addition to more general career preparedness, preparedness can also be more specific, regarding career choice, employment, job searching and so forth (Vuori and Vinokur 2005; Vuori et al. 2008). As an employee's experiences in managing career-related stress situations develop, they learn more stable new skills to successfully manage similar stress situations.

Situations that are managed successfully enhance personal resources which then increase the likelihood of future resources, as resources tend to accumulate. Preparedness motivates a process in which the employee adapts to their work situation, makes plans and sets goals aiming to make their own future brighter, and positively evaluates their possibilities and capacities for achieving these goals.

In order to strengthen employees' preparedness for career management, we need procedural knowledge about effective ways in which to act in challenging career situations, behavioral skills to adopt these effective actions, and motivation to initiate them. Motivation for initiating actions aimed at managing one's career can be enhanced if the training of employees emphasizes three viewpoints (Caplan et al. 1997):

1. Do I believe that I have a resolvable problem and have I accepted that resolving the problem is my responsibility? (evaluation of the problem)
2. Do I have possible solutions for the problem? (evaluation of the solution)
3. Do I believe that I can solve the problem? (perceived self-efficacy)

In the next section we present career management interventions in which we have applied these principles for enhancing self-efficacy and inoculation against setbacks for promoting preparedness for career management. We also demonstrate how these interventions will enhance work-related goals, careers and mental health.

13.2 Two Case Examples of Career Management Interventions

As case examples we describe how preparedness for career management and subsequent working careers and mental health can be enhanced through participation in group-based interventions that promote active learning regarding career management. We begin by describing a field experiment with a group intervention in work organizations for enhancing employees' career management, job retention and mental health (Vuori et al. 2012). We also describe developmental work with the same methodology among younger employees on parental leave, who aim to return to work. Both interventions have been developed at the Finnish Institute of Occupational Health. Together, these two related group programs provide examples of the power of research-based psychosocial interventions to enhance the preparedness of both young and older employees for successful career management and adaptation to the challenges of the current unpredictable career environment.

13.2.1 Career Management in Changing Work Life

A resource-building group intervention called Towards Successful Seniority (TSS) has been developed to enhance career management, mental health and job retention in work organizations. The training program aims to enhance participating

employees' career management preparedness. The group intervention is based on earlier experiences in preventive interventions that apply the enhancement of preparedness for various career transitions (Koivisto et al. 2007; Vinokur et al. 1995; Vuori et al. 2002, 2008). These interventions are based on social cognitive theories on social action, behavioral control and individual coping resilience (Ajzen 1991; Bandura 1986; Meichenbaum 1985).

During the TSS program, career management self-efficacies are strengthened in a procedure in which the career-related goals needed for progress are first identified in peer groups, solutions and tasks for carrying out these goals are defined, and the required skills and actions are practiced in smaller groups. Coping and resilience in an unpredictable career environment are strengthened according to the principles of Meichenbaum's (1985, 2007) stress inoculation training. Group participants share their own experiences of setbacks and barriers during their career and empathize with feelings aroused by these experiences. After the discussions on career experiences, participants define plausible solutions for these setbacks and barriers in larger groups. Finally, they practice these solutions in small groups (Vuori et al. 2012).

The program is implemented into work organizations in such a way that it involves practical collaboration of the human resources (HR) and occupational health services (OHS) of the participating organizations. This aims to incorporate the intervention into organizational practices and to strengthen the collaboration between the HR and OHS units on the working career and mental health issues of the employees (Vuori et al. 2012).

The group program utilizes the MPRC (Michigan Prevention Research Centre) general group training principles' five essential components for effective group training (Price et al. 1998; Vuori et al. 2005). (1) *Career management skills training* focuses on skills that are essential for the successful management of one's own career. These include, for example, the definition of one's own strengths and career interests; understanding the idea of lifelong learning; learning about organizational and work life changes; finding career-related resources from social networks, and solving social conflicts in organizational settings. During the workshops, participants learn concrete means for managing their career. (2) *Active teaching and learning methods* mean that trainers utilize participants' own career knowledge as a focal part of the learning process instead of lecturing themselves. (3) *Skilled trainers* are trained and instructed to build trust and work together in pairs. (4) The *Supportive learning environment* enables participants to learn from and support each other. Learning happens through modeling and strengthening supportive behavior in the peer groups according to Bandura's (1986) social learning theory. (5) *Preparation against setbacks* during the workshops adopts Meichenbaum's (1985) stress inoculation training, described above. The training includes such topics as setbacks during organizational changes and social conflicts at work. A detailed description of the intervention can be found in the Towards Successful Seniority Trainer's Manual (Vuori et al. 2014).

The intervention has been implemented as a universal intervention in work organizations, because it is primarily offered to all volunteers. However, earlier evidence has shown that those who generally benefit most from the interventions are the most vulnerable groups of employees at risk of mental health problems (Seymour and

Grove 2005). Moreover, previous research also indicates that younger participants may benefit more than older ones from career-related mentoring practices (Finkelstein et al. 2003).

13.2.1.1 Effect of the Intervention on Preparedness, Career Outcomes and Mental Health

The participants of a randomly assigned field study were from 17 work organizations, of which the majority reported significant organizational changes during the study period. A total of 718 eligible individuals from these organizations participated in the study. The intervention groups comprised 8–15 employees and/or supervisors, who met for five half-day sessions. These sessions were advertised as enhancing employees' career management skills. (For details of the methods, see Vuori et al. 2012).

The study demonstrated that participation in the workshops had a significant beneficial effect on career management preparedness (Vuori et al. 2012). The results also showed how improved career preparedness led to an increase in intrinsic work-goal motivation (Salmela-Aro et al. 2012). As employees acquire new resources that help them achieve their work-related goals, their work engagement increases (Bakker and Demerouti 2007).

In the long-term, participation in the workshops significantly decreased both depressive symptoms and intentions to retire early and increased mental resources. This is important, as it has been demonstrated how depressive symptoms can gradually accumulate into full-blown depression (van de Leemput et al. 2013). Moreover, the intervention also seemed to show beneficial effects on work engagement in the 7-month follow-up. Participants with an elevated level of depression or exhaustion at baseline benefited more from the workshops than those with lower levels of depressive symptoms (Vuori et al. 2012). Causal analyses with stepwise multivariate analyses (Baron and Kenny 1986; Preacher and Hayes 2008) demonstrated how the proximal increase in career management preparedness among the participants just after the workshop mediated the longer term beneficial mental health and career effects.

Further analyses of our data showed that the workshops proved successful as a form of selective preventive intervention against depression among those who suffered from job stress at baseline. This is an important finding, which demonstrates that the adverse effects of job strain on depression, weak productivity and work disability can be combated within organizations, through training and collaboration (Ahola et al. 2012).

13.2.2 *Enhancing Return-to-Work Preparedness for Parents Ending Parental Leave*

Our second case example demonstrates preliminary results from a more transition-focused intervention study among employees returning from parental leave. In Finland, a parent can stay at home until the child is 3 years of age and return to their

job if they were employed prior to the birth of the child. However, not all parents have a job to return to if they were, for example, employed on a temporary basis, were unemployed or studying prior to parental leave. From the working career perspective, having children affects career continuity, especially among women. Our goal was to enhance employees' preparedness for returning to work and their ability to negotiate the new situation with the employer, including negotiating arrangements for improving the work-life balance.

Return to work from family leave is one of the normative transitions during young people's working careers, and has largely been neglected in research (Wiese and Heidemeier 2012). Returning to work also means "leaving the child" in the care of other people. Mothers of newborn children are at risk of depression (Goodman and Santangelo 2011; Darcy et al. 2011), which may postpone returning to work or make it more difficult to balance work-life after return. Transition is often experienced by young employees who do not have the same experience and skills in dealing with career-related stress as more experienced workers (Demerouti et al. 2012). It is likely that this life transition is a challenge for returning parents' resources, which have to be divided between the different life spheres.

The transition from caring responsibilities and the home sphere to work life requires many new skills for balancing work and family. Returning to one's previous job may mean renegotiating working arrangements with the employer. Family-friendly workplace practices and support from one's supervisor, one's spouse and other social networks outside work are important social resources. Support from one's spouse and coworkers promote good work-family balance, which impacts on satisfaction in both the work and family domains, and may reinforce the positive aspects of the self (Ferguson et al. 2012).

The intervention for parents returning from family leave was based on the Towards Successful Seniority workshop. We developed an application of this workshop with additional contents on discussing and sharing good practices for balancing work and life with small children after returning to work. Information about local employment and child care services were also provided during the workshop. The workshops were arranged by six municipalities who trained trainers from child health care units and daycare facilities. Childcare was also arranged during the workshops.

The purpose of the workshop was to enhance parental preparedness for the return to work transition. We expected that the participating parents would become better prepared for negotiating their new situation with the employer, including making arrangements for the reconciliation of work and child care responsibilities. The purpose was also to increase awareness and broaden the utilization of social networks, which were considered important in making this transition possible, and to focus not only on support from one's spouse but also from other people, including the workplace. The workshop was based on structured manuals (Toppinen-Tanner et al. 2014; Vuori et al. 2014).

We expected workshop participation to increase return-to-work preparedness, which in turn would have beneficial effects on employees' mental health and resources, well-being, work-life balance, later career, and satisfaction with social relationships (Ajzen 1991; Bandura 1986; Michel et al. 2011; Salmela-Aro et al. 2012; Vuori et al. 2012).

13.2.2.1 Effect of the Intervention on Preparedness, Career Outcomes and Mental Health

The effects of this workshop were studied in a randomly assigned field experimental study (RCT). The preliminary results from a subsample of 250 participating parents on family leave suggested that workshop participation significantly increased return-to-work preparedness among the workshop participants compared to the controls. Return-to-work preparedness comprised parental self-efficacies, career management self-efficacies and preparation against possible setbacks. Participants of the workshop reported significantly higher self-efficacies related to being a parent and being able to maintain a balance between work and family after return to work life than those in the control group. Furthermore, the workshop seemed to increase career management self-efficacies, including feeling capable of negotiating one's work with one's employer, making changes in one's job or career, recognizing opportunities to influence one's job and future career, demonstrating one's skills and abilities, and managing stress at work. Workshop participation also seemed to strengthen positive individual resources such as resilience, and decreased negative affectivity.

These preliminary results suggest that the intervention was successful in enhancing return-to-work preparedness among employees planning to end family leave and return to work life. The qualitative data from peer group participants support these results. Based on the feedback from the participants of the workshops, return to work preparedness seems to build on emotional and instrumental peer support. Workshop participants provide each other with valuable tips and solutions for everyday problems, as well as enhance other participants' self-esteem, self-worth and vicarious experiences.

13.3 Suggestions for Further Research

Career management preparedness seems to be a promising concept and encourages a beneficial personal disposition for proactively coping with an unpredictable employment environment (Lent 2013; Sweeny et al. 2006; Vuori and Vinokur 2005). The cases demonstrated how increases in preparedness through the interventions caused later beneficial effects on career and mental health. Well-prepared employees may make better decisions than others regarding their future career during important transitions, and this may explain these findings. Enhanced preparedness also seems to be related to greater work-related goals. As employees are more prepared to manage their working careers, they also see more meaningful opportunities for themselves in work life and are thus more motivated to more persistently pursue them (Sheldon and Elliot 1998). This mediation process should be studied further, because knowledge of beneficial short-term mediators constitutes a foundation for effective behavioral interventions. This is also more generally an important area worth further research, because preparedness can be improved through interventions, and enhanced work-related motivation may also open up new possibilities

for staying at work for longer. Further research should investigate whether better career preparedness has more specific beneficial career and health outcomes and whether preparedness is beneficial in all fields of working life. It could also study whether enhanced preparedness actually leads to longer working careers due to higher motivation.

Preparedness is also related to proactive coping, and prepared employees may not undergo all career challenges in as stressful a way as less prepared employees, because they may have skills to evade or attenuate some of the setbacks (Aspingwall and Taylor 1997; see Sweeny and Ghane, Chap. 8). This also provides new research topics for more traditional stress research. A vast majority of the studies on work and stress have focused on the development of the harmful effects of stress. More studies should focus on the causal process of increasing resources and mental health at work. This research line needs more controlled intervention studies.

These results also underline the need for more research on careers, health and productivity using life course perspectives, and the need for broader definitions of employees' careers. When people have children or get older, their career-related goals may also change. Health questions may take a more central role; balancing work and family and social relationships may become more important, or new needs for learning may arise. Older employees have real productive potential, if they stay motivated. However, even during current pressures for longer working careers it is not at all sure that employers want older employees in their organizations, because of their persistent conceptions of the relationships between older age and weaker productivity (Kahn 1994). The truth seems to be much more complicated and we would urgently need more longitudinal and interventional research in this area.

13.4 Practical Conclusions

The general finding of work life intervention studies has been that in order to be effective, interventions need to focus simultaneously on both the individual employee level and the organizational level (Lamontagne et al. 2008; Sockoll et al. 2008). Regarding enhancing career preparedness among employees, collaboration between actors from both occupational health services and human relations units would provide one possible platform on which these issues could be further incorporated into organizational activities. When needed, these activities could also comprise efforts to boost employability (see Sanders et al., Chap. 11). However, the support of leadership is essential in these activities, which can be seen as group-based professional guidance for employees. Without the support of line-management, possibilities for employee proactivity in managing their own career decreases essentially, which may soon extinguish the achieved benefits in employee activity. Looking at the society level, more proactive and empowered employees would better manage their careers in the rapidly changing working world. This kind of interventions could mean benefits in many societies where economic pressures result in slimmer social support practices for citizens.

In the case of return to work after family leave, when younger parents in vulnerable work career positions return to work life more effectively and they succeed better in balancing work and family life, this can also benefit the society in many ways, for example in increased employment rate and decreased care costs. The most suitable actors for carrying out this kind of activities in communities may well be the health care sector or family services within municipalities, or the activities could be based on collaboration between the health care sector and work organizations. All parents could participate in local activities, irrespective of their position in the labor market.

These kinds of preventive career training practices in work organizations could increase productivity and benefit the organization by generating more confident, resilient and healthy employees, who continue well into the senior phase of their working careers. More proactive employees with longer careers would also benefit societies which struggle in great economic pressures partly created by longer lives of citizens.

Recent research on retiring employees seems to indicate that the typical decline in mental health over the later life course is not inevitably connected to aging. On the contrary, exiting meaningful and important social roles and losing the sense of control over their careers and lives, have detrimental mental health consequences for older people (Mirowsky and Ross 1992; Wang et al. 2011). This was also demonstrated in a longitudinal study by Dave et al. (2008), in which retiring at an older age seemed to lessen or postpone poor mental health. Poor personal control in the case of involuntary retirement seemed to increase adverse health effects. If aging adults could remain in productive and socially connected roles, healthy and with an adequate income, their mental health would have the potential to even improve over the later life course (Clarke et al. 2011). Work can be a valuable resource; a source for self-worth and self-fulfillment. From the working life perspective, opportunities for individual flexibility also have the potential to increase the sustainability of working careers.

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Chapter 14

Promoting Older Workers' Job Retention and Health by Working Hour Patterns

Mikko Härmä

14.1 Working Hours and Ageing

The significance of time in working life has increased. Work can and often needs to be done at any time and at any place due to new technology, globalization and increased needs for flexible production, services and co-operation. Although industrial shift work is partly moving to new low-salary countries, the 24/7 society is getting more common also in industrialized countries. Work has thus become more intense and fast-paced and working time patterns have become more diversified, flexible, irregular and – unhealthy (Härmä and Kecklund 2010). In many sectors and especially among experts and knowledge workers, the growing needs for competition has increased time pressure at work while the time left for recovery is often insufficient. Due to discrepancies between time available and time needed, individual need to control time has become apparent.

Due to the increased diversity of the working hours, we need to understand and handle the new and often complicate dimensions of time at work. Working hours are nowadays too complicate to divide them only to day and shift work or e.g. to short and long working hours. Also shift work systems vary in relation to the used shift characteristics, shift systems having differences in the amount, rotation, regularity and the number of shifts. In order to analyze work stress due to working hours, we have recently taken into use the following classification to study company-based registry data on working hours (see Fig. 14.1). Besides the length of the working hours and shift work, the other main characteristics to be analyzed are the different aspects of consecutive working days, recovery between shifts, social aspects of working hours, variability of working hours, predictability of working hours and work time control.

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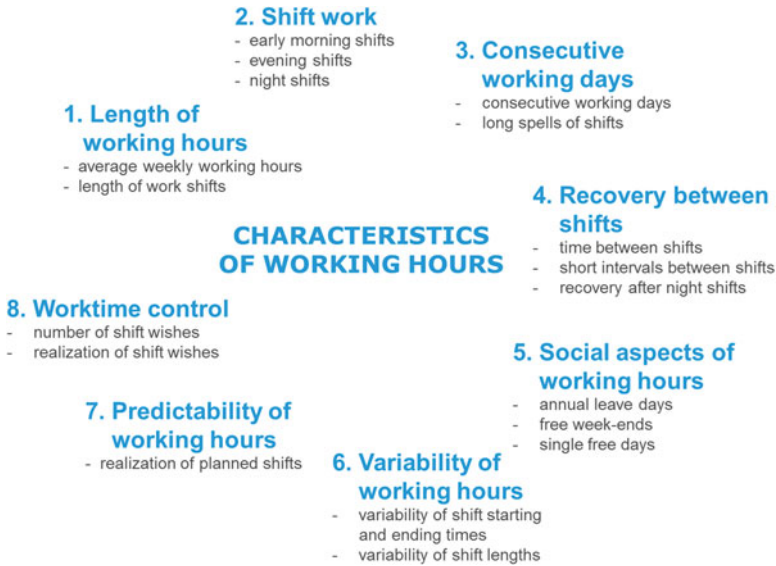


Fig. 14.1 Characteristics of working hours

Work time control indicates the possibilities to have individual control for working hours, like for the starting and ending times of the working days, the length of the working time and the distribution of vacations and work breaks. It should be kept separate from the *company-based flexibility* in working hours that refers to the needs of employers to extend, modify, or reduce working hours according to client and production needs (Härmä 2006). Shift work and paid overtime, as well as part-time and weekend work, are common forms of company-based flexibility. While company- and customer-oriented flexibility have clearly been on the increase, also individual flexibility in working hours and employee work time control have become more common (Eurofound 2010).

Night and shift work is most common among young employees. In the whole Europe, night work (according to working for at least 2 h between 10 pm and 5 am), is undertaken by 19 % of workers of the EU27 countries (Eurofound 2012). Night work was more common also among men (23 %) than women (14 %). Among men, night work was most common in the age group of 25–39 years (25 %) while among women, it was most frequent (16 %) among women less than 25 years. Seventeen percent of workers in Europe work in shifts. In addition, 54 % of the self-employed with employees and 11 % of the other employees worked long working hours (at least 48 h a week). More than half of the workers work at least once in the weekend. Nearly 24 % of European workers worked part time and 21 % had on-call work. Based on the European Company Survey (Eurofound 2012), 29 % of all companies with ten or more employees offer flexitime schemes with enough flexibility to allow for whole days to be taken off from work.

The simultaneous decrease in both the birth rate and mortality is transforming the population's age structure worldwide. On a global scale, the working-age population (15–64) is growing for the next decades and in many industrial countries there will be two under 65 year-old working-age citizens per one older person by 2050. The above trends and the related societal costs have also forced industrialized countries to find new ways to extend life-long work careers. There is need to extend the work careers from the beginning, middle and end of the traditional working life, and many countries have already increased the general retirement age.

Although older workers have less shift work, the ageing of the working population and the increasing retirement age mean that the number of older workers with abnormal working hours will also increase. The delay of retirement age increases also life-long exposure to abnormal working hours, the effects of which on health are unknown. On the other hand, the new forms of working hours offer new possibilities to control and support employment among the ageing workers. The promoting of older workers' job retention and health by working hour patterns will depend on the interaction of several individual, social and job-related factors. Working hours influence health, safety and performance but they also influence work motivation through possibilities to influence working hours themselves and the related work-life balance.

This paper aims to summarize the understanding on relationship of ageing, working hours and well-being and reviews the current evidence and possibilities to promote older workers' job retention and health by working hour patterns.

14.2 Working Hours, Health and Well-Being at Work

Working hours have a strong influence on well-being at work. Shift work has been a health issue in Europe since the end of the eighteenth century when night work was banned for women for health reasons in many European countries. Working hours influence not only occupational health and safety, but also work-life interference and work satisfaction. Working hours have also high relevance for performance and productivity through the paid working hours, possibilities for increased company-based flexibility and shift work. Working hours also influence general work satisfaction. Based on the recent 5th European Survey on Working Conditions (Eurofound 2012), the top-three positive factors increasing job satisfaction among all the work-, employment and health-related determinants of job satisfaction were having a good fit between working hours and social commitments, the perception of being well-paid for work and good career prospects and leadership (for employees).

The effects of shift work on sleep and alertness are most well established, the strongest evidence coming from field and intervention studies (for a review, see Sallinen and Kecklund 2010) showing that changes in shifts influence sleep, alertness, and fatigue. Alertness and the related vigilance at work deteriorate especially during the early morning and night shifts and in situations where e.g. long working

hours or too short time between the shifts hinder sufficient sleep and recovery before the following working day. Both shift work and long working hours are related with 50–100 % increased risk for accidents at work compared to day work (Wagstaff and Lie 2011). For example, at the end of a 12-h shift, the accident risk at work is about two times higher compared to the end of an 8-h work shift.

Both the extensively long working hours and shift work can cause health problems. Extensively long working hours (55 h or longer a week) are risk factors for the development of coronary heart disease, depression, and sleep disturbances (Virtanen et al. 2012a, b). In 2007, International Agency on Research on Cancer (IARC) concluded that “shift work that induces circadian disruption” is probably carcinogenic to humans (Straif et al. 2007). Several systematic reviews (Kolstad 2008; Frost et al. 2009; Vyas et al. 2012) suggest that shift work can increase the risk for both ischemic heart disease and breast cancer. Based on recent evidence, shift work can also be a risk factor for peptic ulcer and gastrointestinal symptoms (Knutsson and Bøggild 2010), type II diabetes (Pan et al. 2011), rheumatoid arthritis (Puttonen et al. 2010) and even MS-disease (Hedström et al. 2011) and psoriasis (Li et al. 2013).

Besides the physical disorders, shift work is related with work-life balance, work stress, and mental disorders (Bara and Arber 2009) at work. Shift work and irregular working hours can disturb the work–life balance since working hours define the time available for social and family activities – in relation to the time of the day, week and year. For example, even after adjustment for work stress, working in shifts decreased the perceived balance between work and social life in a prospective cohort study (Jansen et al. 2004). Some aspects of working hours, like shift work, are also associated with lower job control (Härmä et al. 2006).

Taking all the evidence together, shift work is related to a wide range of public health problems ranging from cardiovascular disease and cancer to mental health and accidents. Although the risk estimates for the outcomes are low (odds ratios usually under two), the wide exposure of workers to shift work combined with the high number and prevalence of the possible diseases associated with shift work means that shift work is definitely among one of the most serious occupational health problems of our time – and a risk factor for the ageing population with the growing prevalence of chronic diseases.

14.3 Intentions to Stay at Work: The Role of Working Hours

A critical prerequisite for the extension of work careers is sufficient work ability. Work ability is often conceptualized as the balance between work and personal resources and can be measured e.g. by the Work Ability Index (WAI). On the other hand, even the ageing employees would have sufficient work ability, the different features of work and personal life influence “willingness” to stay at work.

Factors influencing the expectations of the workers to do their job still at the age of 60 years were studied also in the 5th European Survey on Working Condition

(Eurofound 2012). Fifty-nine percent believed to be able to do the same job at that age. The factors that were most significantly related with the intentions to work until that age were work-life balance (“working hours fit with family or social commitments”) and job strain. In a telephone interview (of a random sample of the currently working Finns aged 25–64) workers were similarly asked on their opinions on continuing work after the age of 63 (Perkiö-Mäkelä et al. 2012). In 2009, 59 % of the workers aged 45–63 years considered to continue still after the normal retirement age. The strongest factors influencing intention to stay at work were health, good financial situation, the general importance of work and – possibilities for improvements in working hours. Good working hours were important especially for the lower socio-economical class having less flexibility. In Sweden, Nilsson et al. (2011) evaluated the factors why some older workers wanted to work until the age of 65 years or beyond while others would like to leave the workforce earlier. The factors behind willingness to work later were related foremost to economic incentives, but also to family/leisure pursuits and societal, managerial, and organizational attitudes towards retirement and older workers. Also working hours were of importance. Recently, a qualitative study (Oakman and Howie 2012) utilized group interviews among older employees of a large public service organization to study their intentions and experiences to retire. The conclusions were that organizations can retain their older workers longer if they provide sufficient support to the workers, the work offered is satisfying for the older workers and has options for part-time work (Oakman and Howie 2012).

14.4 Working Hour as Predictors of Disability Pensions

According to an OECD report, about 6 % of the working-age population relies on disability benefits (OECD 2010). Until the recent recession struck the labor market in 2008, disability was even more prevalent than unemployment across the different OECD countries and spending on disability benefits was twice as high as spending on unemployment benefits. The primary diagnostic causes for disability retirements are musculoskeletal diseases and mental disorders. Disability pensions start averagely much earlier than old age pensions: in Finland, the average starting age of a disability pension was 53.9 years in the public sector (2011) while the average starting age of an old age pension was 63.7 years (Salo et al. 2012). Prevention of early disability pensions on individual level would be more efficient for the extension of work careers.

Several epidemiological studies have investigated the work-related and other reasons for disability pensions. For example, Leinonen studied the association of disability retirement to socioeconomic position and working conditions. Based on a 10-year prospective study of municipal employees in Helsinki, large social class differences were found in disability retirements. In lower social classes, unfavorable physical working conditions were the primary reason for disability retirement. For mental disorders, job control mediated the association.

In general, work strain seems to have far-reaching negative effects on individuals' work ability from midlife to old age and work ability declines faster in physical than mental work (von Bonsdorff et al. 2011).

Some studies have also looked at working hours as possible predictors for disability pension among general population. Most of these studies have focused on shift work (Claussen et al. 2009; Friis et al. 2008; Hublin et al. 2010; Krause et al. 1997; Tuchsen et al. 2008; Boedeker et al. 2008) and only one reported on the role of long working hours on disability pensions (Krause et al. 1997). Similarly, only one study up to now has examined the influence of work time control on disability pensions (Vahtera et al. 2010). If we look at the five studies among general population analyzing the effect of shift work on disability pensions (Claussen et al. 2009; Krause et al. (1997); Tuchsen et al. (2008); Boedeker et al. (2008); Hublin et al. (2010), all five report positive unadjusted risk factors for shift work in relation to disability pensions. Most of the studies were also positive for shift work after adjustment for different other health and work-related risk factors indicating that shift work among men (Krause et al. 1997; Boedeker et al. 2008) and women (Tuchsen et al. 2008; Boedeker et al. 2008) may increase the risk for disability pensions. After adjustment for other factors like job control (that is often also related to working hours), the positive odds ratio for men (1.67) disappeared in the study of Claussen et al. (2009). Similarly, adjusting for sleep disturbances, diurnal type, sleep length, smoking and body mass index (that are all influenced by shift work), the significant hazard ratio of 1.88 among women in the study of Hublin et al. (2010) for disability pension due to cardiovascular diseases also disappeared. Since Hublin et al. (2010) included several mediators of the effects of shift work to cardiovascular health in the final statistical model, this study underestimates the effects of shift work on disability pensions. Also evening work (OR 1.51) and night work (OR 1.45) increased the risk for disability pensions in the Danish Nurse Cohort (Friis et al. 2008) and working 60 h or more a week increased the risk for disability pensions in the study of Krause et al. (1997).

One of the most interesting publications on this area comes from the Finnish Public Sector Study (Vahtera et al. 2010). Vahtera et al. (2010) examined whether high work time control was associated with a reduced risk of subsequent disability pension independently of other risk factors for ill health. In order to reduce subjectivity bias, work time control was measured both by individuals' self-reports and using the co-worker assessments. The work time control measure consisted of seven items related to the control over shift length, starting and ending times of the working day, breaks, taking care of private matters during the working day, and scheduling of work shifts, vacations and days off. The working hour information was obtained from a survey in 2000–2001 among 30,700 public sector employees (78 % women) aged 18–64 years. Information on cause-specific disability pensions during the follow-up of up to 5 years was collected from national registers. The main results of the study were that an increase in self-assessed and co-worker assessed work time control score was associated with a substantial decrease in the risk of disabling musculoskeletal disorders among both men and women (Fig. 14.2). The association was robust to adjustment for 17 baseline covariates. Self-assessed, but not co-worker

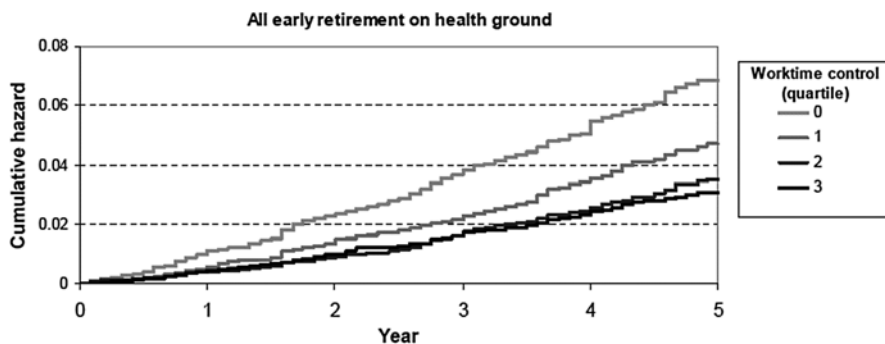


Fig. 14.2 Cumulative hazard of early retirement on health grounds in general by quartile of work time control (Reprinted from Vahtera et al. 2010, Copyright (2015), with the permission from BMJ Publishing Group)

assessed, work time control was also associated with the risk of disability retirement due to mental disorders in women. Disability pensions from other disease categories were not related to work time control.

14.5 Shift Work and Age

We have thus studies showing that working hours and shift work are important for health and well-being and influence decisions on retirement. Working hours in different forms even predict disability pensions in a long run. However, do we really know why age is related to the health effects of shift work and is it possible to change the shifts systems or average weekly working hours to improve the health and well-being of ageing workers? And if we would know what really works in prospective settings, is it feasible to make such changes in different sectors systematically?

14.5.1 Age, Circadian Adaptation and Sleep in Shift Work

In order to understand the best ways to change and improve the shift systems among ageing workers it is necessary to know how ageing is related to adaptation to shift work.

Certain shifts and shift systems are difficult for the human circadian system in terms of adaptation. Such shifts disturb the body circadian rhythms, including the variation of sleep and wakefulness. For example, severe sleepiness was reported by 49 % of the workers on night shifts and by 20 % of those working on early morning shifts (Härmä et al. 2002). The risk for severe sleepiness was 6–14 times higher on the night shift and about twice as high on the morning shift than on the day shift. Sleep complaints become more common while ageing and the same concerns shift

workers. For example, in a prospective study of 12,000 men aged 40–50 years (Moneta et al. 1996), the prevalence of self-reported sleep complaints among night shift workers varied from 22 to 36 %. The difference in prevalence between night shift workers and those who did not do nights increased from 6.2 to 13.3 % during the follow-up time of 5 years.

Basically the human circadian system is rigid, but in cases of consecutive night shifts (or during time-shift flights), it starts to adjust to the change. However, adjustment is difficult since the human circadian system is synchronized by the environmental light exposure that does not change in synchrony with the work shifts. In slowly rotating shift systems, more circadian adjustment takes place than in rapidly rotating shift systems (Härmä 2000). However, without exposure to artificial bright light, rapid adjustment occurs in permanent night work only among a minority of the workers. Even if rapid adjustment would take place, time is needed for re-adjustment after the end of the successive night shifts. Most recommendations on shift systems support nowadays the use of only few consecutive night shifts, the so called “rapidly rotating” shift system (e.g. Sallinen and Kecklund 2010). Rapidly rotating shift systems are better for recovery while the use of several consecutive night shifts often causes more sleep deprivation in a long run.

The age-related changes in sleep arise also from the age-related trends towards “morningness”, a tendency to prefer early waking and sleep times. The difficulties in circadian adjustment to late evening and night work are also partly related to the age-related changes in the circadian timing system. In general, ageing influences sleep structure by decreasing “deep sleep” (slow wave activity of the EEG) and by increasing the number and duration of arousals from sleep. There is still no consistent evidence that ageing would increase sleepiness during night shifts. Often younger shift workers are sleepier than older shift workers during the morning shifts while older workers may be sleepier than younger workers in late evening and night shifts (Rosa et al. 1996). However, poor sleep after the night shifts may be related with lower cognitive performance at the end of the night shifts. To study this, we examined the interactions of age with sleepiness and cognitive performance in the different shifts of the shift workers Bonnefond et al. 2006. According to the results, subjective sleepiness was even higher among the young shift workers (25–34 years) during the night and evening shifts compared to the older (50–58 years) shift workers. However, the increase of performance lapses was two to threefold among the middle-aged and older age groups during the night shifts compared to the youngest age group (Fig. 14.3).

In an experimental night shift experiment, we studied the effect of ageing on the circadian adaptation to consecutive night shifts (Härmä et al. 1994). Comparing two age groups (19–29 years and 53–59 years), age was significantly related to the circadian adjustment to night work based on the body temperature rhythm, salivatory melatonin and self-rated sleepiness. During three consecutive night shifts, young subjects delayed their temperature phase and became more alert while older subjects did not. Older workers slept less after the night shifts and were not able to improve their alertness during the consecutive night shifts like the younger workers.

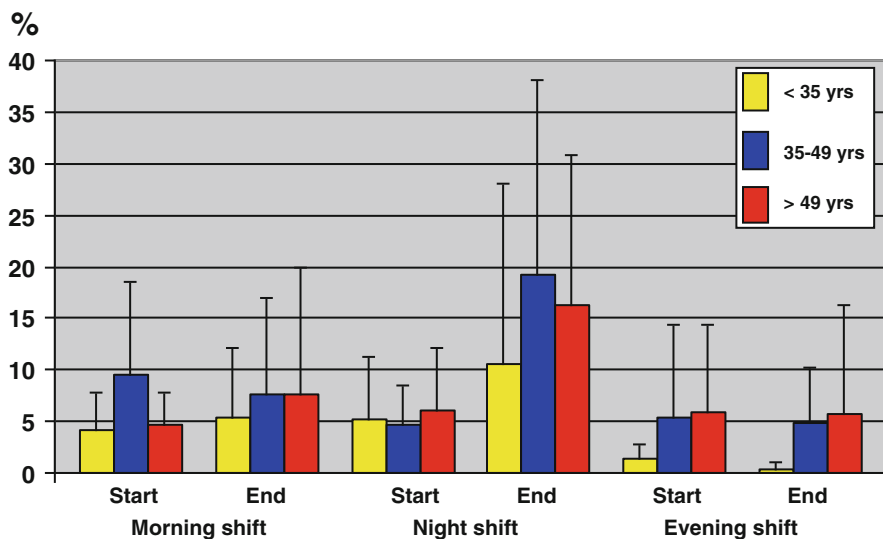


Fig. 14.3 Mean percentage of lapses (PVT) of the young, middle, and senior groups at the beginning and end of morning, night and evening shifts (Published in Bonnefond et al. 2006)

14.5.2 Preferences for Work-Life Balance

Irregular working hours have major impacts on both leisure and domestic activities of all shift workers. The effects of shift work on leisure time can, however, be both positive and negative at the same time. The same shift system may offer some advantages like more consecutive free days but possess simultaneously disadvantages like weekend work or consecutive evening shifts interfering with social contacts. The economic situation of employees usually become more secure along with ageing, and the housing and sleeping conditions improve hand-in-hand with the economic situation. Ageing employees also may prefer the compensation of shift bonuses as days off, whereas younger employees may prefer monetary compensation.

Because also domestic responsibilities often decrease when children grow older, the biological ageing effects on health may be compensated by the favorable psychosocial and economic situation. Older shift workers are also favored by the fact that they are “self-selected” and may be more experienced in different coping mechanisms such as napping and the use of physical activity. Ageing also changes the positioning of leisure-time value. Although all workers, including shift workers, often value the evening hours and weekends most, over 45-year old shift workers valued more free-time in the mornings, reflecting the observed trends in greater “morningness” in leisure-time activities compared to the younger shift workers (Härmä and Ilmarinen 1999; Härmä and Kandolin 2001).

14.5.3 *Optimal Shift Systems for Ageing Workers*

There are several shift characteristics relevant for ageing shift workers. As discussed before, older workers prefer morning shifts compared to younger workers. If ageing is related with lower work ability, there may be higher needs for recovery and the use of work breaks. In general, short recovery between the shifts, the so called “quick returns” are related to shortened sleep (Sallinen et al. 2003). Similarly, a later starting time of the morning shift normally extends sleep. In a controlled intervention study, a 1-h delay of shift start-end times from 06–14, 14–22 to 22–06 resulted in improved alertness and sleep quality of both the younger and older shift workers (Rosa et al. 1996). Even the intervention ended mostly to improved sleep, the middle-aged and elderly workers of the steel factory still preferred more the earlier starting times of the shifts. In an irregular shift system, each hour delay in the starting time of the morning shift was averagely related to a 40- to 50-min extension of the main sleep length (Sallinen et al. 2003).

The speed and direction of shift rotation, as well as the distribution of free days within the shift system, have proven to be key characteristics for the preference and acceptability of the shift systems by the shift workers. A fast rotation speed means the shift system having only few consecutive similar shifts, and forward rotations means that there is more time for recovery between and after the end of the different spells of shifts. Shift systems also differ in terms of how the speed and direction of the shift rotation are combined. Based on several intervention studies, the so called “rapidly forward rotating” shift systems seem to give the best possibilities for recovery and sleep and have proven to be most favorable in respect to also social and family life and even sickness absence of the workers (Hakola and Härmä 2001; Härmä et al. 2006; Viitasalo et al. 2008; Hesselink et al. 2010). Only a couple of negative studies exist (e.g. Karlson et al. 2009).

We have ourselves carried out several intervention trials in different occupational sectors with the general aim to create “age-friendly” shift systems and the outcome of these trials have been quite successful and the results consistent. First, a change in the speed and direction of shift rotation was studied in a steel factory where a continuous three-shift schedule was changed from a slowly backward rotating system (EEE--MMMNNN----; E = evening shift, M = morning shift, N = night shift, – = free day) to a faster forward rotating system (MMEENN----) among two age groups (Hakola and Härmä 2001). The effects of the new work schedule were evaluated by a questionnaire (modified SSI), and on-site registrations with objective sleep recordings (an actigraph) and sleep log during one shift cycle (10–15 days) before and after the new schedule. After the change in schedule, subjective sleep problems decreased and alertness increased during the morning shifts. The change in schedule influenced sleep differently in the two age groups. Both the subjective and objective quality of sleep improved among the older workers. Later, an even faster forward rotating shift system (MEN--) was compared to a more slower and backward rotating shift system (MMM--NNN--EEE--) among maintenance work-

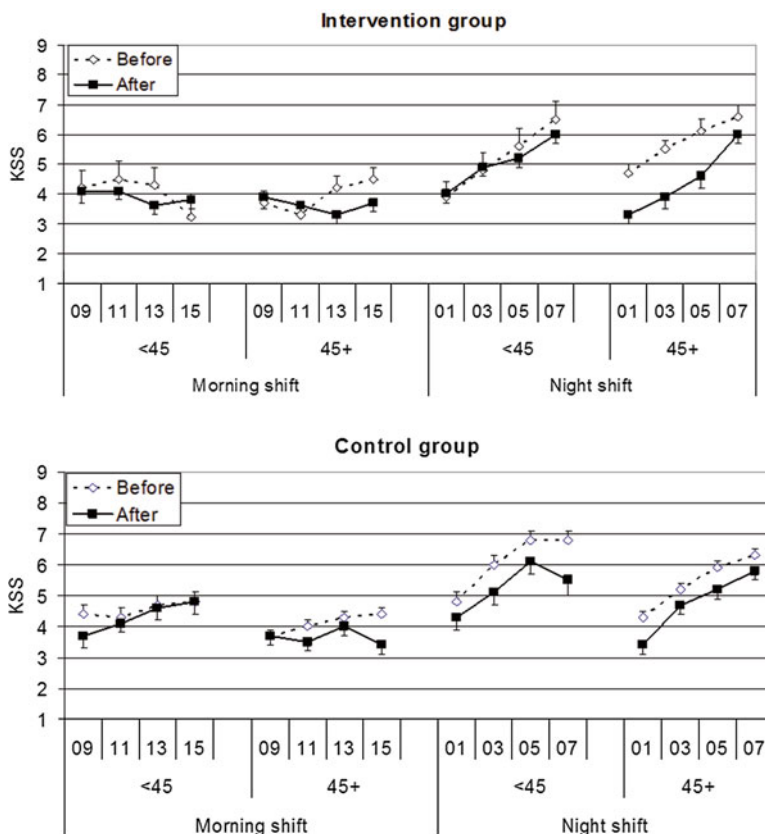


Fig. 14.4 The effects of a rapidly forward rotating shift schedule on Karolinska Sleepiness Scale (KSS) during morning and night shifts. The data is based on the estimates of the means and standard errors from the used statistical model according to group (intervention/control), time (before/after the intervention) and age (44 or younger, 45 or older) (Reprinted from Härmä et al. 2006, Copyright (2015), with the permission from Elsevier)

ers in a flight company (Härmä et al. 2006) with a control group with no change in shifts. The use of the new shift schedule increased the main sleep length after the night shifts and improved alertness (Fig. 14.4) and psychomotor performance during the night shift among the older (over 45 years) workers. Alertness improved during the recovery time after the night shifts, and sleep complaints decreased after all shifts. The shift workers also reported that the new shift system improved both their social and family life. A change from a slowly backward (NNN--EEE--MMM--) to a faster forward rotating roster (MMEE--NN--) in a large group ($n=4,600$) of steel workers (Hesselink et al. 2010) was related to a decrease of fatigue, musculoskeletal complaints and perceived workload 1 year after the change in shift system. Also in this study the improvements in health were larger among the older (50–64 years) than the younger (18–49) workers.

14.6 The Length of Working Hours and Age

As discussed before, extensively long working hours (55 h or longer a week) are a risk factor for health (Wagstaff and Lie 2011; Virtanen et al. 2012a, b). Long working hours contribute to the “double burden” of full-time and domestic work, exposing especially workers with several domestic duties or impaired health to the greatest risks. Probably due to the still different role of men and women in many families, the proportion of women working more than 45 h per week is remarkably smaller than among men (Virtanen et al. 2012a).

The shortening of long or even normal working hours (about 8 h a day) could thus be a relevant and practical way to decrease the work demands and work load of older workers. The literature on the preference of 8- or alternatively 12-h work shifts does not provide an answer to the problem, since the use of longer work shifts in shift work are normally not reflected to longer average working hours due to extra days off. We do have, however, some intervention studies that have compared the use of shorter or longer working hours on health.

In an intervention study among female health care workers, a decrease in working hours from 8 to 6 h resulted in improvements in the social life of the workers and in moderate improvements in well-being, when the group was compared with a reference group with no changes in the length of working hours (Åkerstedt et al. 2001). In another study, a shift from 8 to 6-h workdays was followed by a reduction of neck–shoulder and back pain in three separate organizations when fulltime payment of the workers was retained (Wergeland et al. 2003). Additional Finnish studies on the use of shorter working hours showed that benefits were clearest for social life, but the shortening of the daily working hours introduced also positive effects on the perceived stress of the workers (Anttila 1997). The length of actual working hours is also dependent on the frequency and duration of work breaks. Several studies have tried to discover the optimal duration, frequency, and type for rest breaks that reduce job strain. In general, the use of rest breaks lead to less strain and injury and decreased accident risk (Taylor 2005; Tucker et al. 2003), but the role of work breaks among younger and older workers has not been studied.

Perhaps most relevant, shorter working hours or part-time work could be used to support the work ability of ageing workers with an increased risk for disability pensions. According to Ropponen et al. (2014), part-time work (≥ 50 % of full-time work) was a strong protective factor for disability pension while part-time work < 50 % of full-time work indicated even increased risk for disability pensions. The associations were confirmed to be independent from several mediating factors including familial confounding. The authors suggest that activities to support individuals to work, such as provision of part-time work and part-time sickness absence may be useful tools for preventing or postponing disability pensions.

Recently, the effects of the use of partial sick leave on return to work and health was studied by a randomized controlled trial among employees with musculoskeletal disorders (MSD) (Viikari-Juntura et al. 2012; Shiri et al. 2013). Patients aged 18–60 years who were unable to perform their regular work due to musculoskeletal

disorders were randomized to part- or full-time sick leave groups. In the former, workload was reduced by halving working time. The findings showed that shortening of the working hours (part-time sick leave instead of full sick leaves) provided even a faster and more sustainable return to regular duties than full-time sick leave among patients with musculoskeletal disorders. Further on, part-time sick leave did not exacerbate pain-related symptoms and functional disability, but improved self-rated general health and health-related quality of life in the early stage of work disability due to musculoskeletal disorders. Workers who seek medical help at occupational health services due to musculoskeletal problems consider themselves also more often partially able to work rather than completely unfit for work (Martimo et al. 2007).

14.7 Work Time Control and Age

The use of individual flexibility in working hours has increased considerably in Europe during the recent years. Today, many organizations aim at flexible working time arrangements that combine company-based and employee-oriented flexibility. An interesting example of a relatively new and intense flexible working time intervention is self-scheduling, mostly applied in shift work settings. The employer defines the number of workers needed for several specific time units and employees can then choose their own working hours needed for the task. The potential benefits of good work time control are interesting since several key occupational health theories suggest that working time autonomy – as a subdimension of general autonomy – may stimulate worker motivation, health, and performance, and may prevent stress, absenteeism, and turnover (Beckers et al. 2012).

A recent systematic review concluded that there are theoretical and empirical reasons to view work time control as a promising tool for the maintenance of employees' work–non-work balance, health and well-being, as well as job-related outcomes (Nijp et al. 2012). Based on cross-sectional studies, higher individual work time control was related to less mental stress and distress due to conflicts in combining workplace and family roles. Especially the intervention studies of the review (Nijp et al. 2012) indicated for a positive causal association with work–non-work balance. For example, in a 6-month before–after study of six maternity wards, the effect of improved individual work time control on the perceived health of hospital midwives was studied (Kandolin and Huida 1996). As a result of the intervention, work strain and perceived stress decreased, the most obvious changes taking place among the elderly midwives. Ageing and work time control was also studied by Lowden and Åkerstedt (2000) in an intervention study of the combined use of self-selected working times and a time bank. Although the use of the new system resulted in a negative development in the staffing level, the self-selected working hours markedly increased the employees' satisfaction with their working hours. Younger shop assistants were more positive towards the experiment, used the

time bank more, and after the change had better possibilities to influence their schedules than the older (45 years or more) workers. However, at the end of the study, the majority in the older group still felt more positive than negative about the new working time system.

Based on the review of Nijp et al. (2012), evidence for the association of work time control for health was still insufficient. For example, among the maintenance workers of Finnair, the implementation of a shift system with several components of individual flexibility ended up to a decrease of systolic blood pressure and heart rate, but did not change sleep quality or diastolic blood pressure (Viitasalo et al. 2008).

The strongest evidence for the possible positive effects of work time control in relation to ageing workers comes from the epidemiological studies. In a prospective study of the Finnish Public Sector Study, women with a low level of work time control had a 1.9 times higher odds ratio for poor self-rated health, a 1.4 times higher odds ratio for psychological distress, and a 1.5 times higher risk of medically certified sickness absences than women with a high level of work time control (Ala-Mursula et al. 2004). Another study (Ala-Mursula et al. 2005) showed that good control over worktime reduced the adverse effect of work stress on sickness absences, especially among female employees. In addition, good work time control was associated with less negative effects of long total working hours (work + home) on subjective health and future sickness absences (Ala-Mursula et al. 2006). As discussed before, a negative association was found between the work time control and future disability pensions (Vahtera et al. 2010). Recently, the association of working conditions, health and work time control to extended employment for the duration of more than 6 months was studied (Virtanen et al. 2014). Good work time control in combinations with good mental health were the key factors in extended employment into older age. However, high work time control seemed to promote work life participation irrespective of employees' somatic disease status.

14.8 Conclusions

Ageing means a marked increase in individual differences both in the physical, mental and social sense. Adaptation to night work is individual and older shift workers often represent a selective population and have special needs for “healthy” shift systems and have higher needs for recovery. Ageing is not related with sleepiness in all shifts, but older workers sleep less and have lower cognitive performance in connection with consecutive night shifts. Shift work is related to a wide range of public health problems ranging from cardiovascular disease and cancer to mental health and accidents. There is also considerable evidence that working hours are related with attitudes for retirement and disability pensions.

Shift schedules vary greatly in relation to how they offer time for recovery, sleep and social life and how the shift systems interact with human circadian rhythms. The number of consecutive night shifts, the speed of shift rotation and the length

Table 14.1 Promoting older workers job retention and health by working hours

Mechanism	Ways to improve working hours
Prevention of health problems	Prevention of excessive working hours
	Improvement of shift systems
Decrease of work load	Decrease of average or daily working hours, part time work, partial sick leave, increase of work breaks, improvement of shift systems
Improvement of work-life balance	Possibilities to influence working hours, working time autonomy, adjustment of working hours to individual needs for health and work-life balance

and starting time of the shifts modify the work load. The changing physical, social, personal and economical needs create interests to change the daily, weekly, annual or life-time working hours. Considering the increase of individual differences according to ageing, the promotion of health and work ability of the heterogeneous older work force should be based on individual solutions.

Older workers job retention and wellbeing can be supported by working hours in different ways relating to the specific characteristics of working hours as either “push” or “pull” factors in relation to older workers’ job retention and health. Some features of working hours, like shift work, can thus be additional risk factors for exit from work while some other features, like part-time work, can offer opportunities for a more sustainable work. Although evidence is still insufficient, we can hypothesize that improvement in working hours can extend the individual work careers and increase work ability of older workers by the means of (i) prevention of health problems, (ii) decrease of work load and (iii) improvement of work-life balance (Table 14.1). The prevention of health problems is possible by shortening long working hours and by favoring the use of forward rotating shift systems. Shorter working hours, part-time work, partial sick-leave and individual solutions in shifts systems and work arrangements can help ageing workers with disabilities (Fig. 14.5). The increase of work-life balance by supporting individual possibilities to control working hours is among the most promising way to support the individual work ability and to make working life a more attractive option for the growing number of ageing workers (Fig. 14.2).

The improvements in working hours need to be implemented into wider policy and practice actions at both the societal and organizational levels. At the societal level, the use of shorter working hours and partial sick-leave need to be implemented by changes in employment and welfare policies supporting the maintenance of work ability, job retention and return to work. This has been already been done in some countries, like in Scandinavia (Kausto et al. 2008). National collective agreements, decided by the labor unions, set important boundaries for the development and good practices in working hours supporting health. Employer and employee organizations are thus key stakeholders for society- level changes. The improvement of shift ergonomics and possibilities to influence working time needs to be linked, however, to the organizational level OSH management strategies. One efficient implementation strategy is to bring shift ergonomics evaluation tools inside



Fig. 14.5 To improve the work ability of ageing workers, work load can be reduced by shorter or improved working hours

the generally used shift scheduling softwares. In Finland, we have implemented a shift ergonomics evaluation tool into the shift scheduling software used by the public sector (Titania®, CGI).

14.8.1 Future Research Needs

Working conditions and the work itself need to be modified and improved in such a way that the ageing workers' sufficient work ability is maintained or supported and people can and want to participate in working life. More applied research is needed to develop and test practical counter-measures to improve the health, safety and well-being of older shift workers. There is a lack of research on age-specific shift scheduling and age-related information on the preference of different characteristics of working hours in relation to health, well-being and work-life balance. The epidemiological research on working hours and health among ageing workers is still surprisingly inconclusive. This is partly due to poor exposure assessment that has been based on self-reported and discontinuous data prone to bias and inaccuracy that offer limited possibilities for categorization. There is need to develop objective methods to evaluate the new and different working hour characteristics (length, timing, recovery, regularity, predictability, work time control etc.) in relation to health, well-being and work-life balance. The analysis of "natural interventions" on working hours is also needed. In general, research is needed on the practical and feasible ways to modify the work characteristics to promote older workers' job retention and health by working hour patterns.

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Chapter 15

Prolonged Working Years: Consequences and Directions for Interventions

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Increasing longevity and decreasing fertility worldwide are driving global population aging. For most industrialized countries and even some developing countries, the consequent rapid growth in the size of the older population and the smaller number of younger workers will dramatically increase the old-age dependency ratio. Worldwide the number of people age 65 and older as a percent of the population age 15–64 will increase from 12 % in 2010 to 25.4 % in 2050 (Eurostat 2012). Japan will experience the largest growth in the dependency ratio, going from 35.1 to 73.8 %. Yet even countries with relatively high fertility rates like India will see dramatic growth, from 5 % to more than 20 % in the same period.

Countries vary widely regarding retirement ages and the extent to which governments provide sources of retirement income to retirees (Associated Press 2013). Extensive research has demonstrated strong behavioral responses to retirement incentives such as public pensions—finding that most people retire when the pensions become available (Gruber and Wise 2002). Some countries have responded to the growing old-age dependency ratio by increasing the age of eligibility for public pensions. For example, retirement ages in Italy and Germany have recently been increased. Extending the working lives of older adults will likely relieve pressure on public budgets but also may yield benefits to individuals, for example, delaying age-related cognitive decline (Rohwedder and Willis 2010; Fisher et al. 2014), or at least may not cause undue harm. Indeed, some evidence suggests that there is substantial work capacity at older ages in the U.S. (Cutler et al. 2011; Milligan and Wise 2012). On the other hand, it seems likely that some individuals may be harmed by policies that prolong work lives.

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This chapter considers the potential impact—both good and bad—of working longer and proposes interventions aimed at maximizing positive outcomes and mitigating negative ones. We begin with presenting a theoretical framework for understanding the consequences of prolonged work. Second, we explain the economic, health, and psychological factors related to decisions to continue working in later life. We present preliminary results from nationally representative U.S. data to examine characteristics of individuals who are working longer. We then review some of the consequences of prolonged work based on empirical research findings and describe interventions that should be considered to promote longer work lives and to ameliorate potential negative consequences of working longer. We conclude with a summary and recommendations for future research.

15.1 Theoretical Framework

The job demands/resources model (Bakker and Demerouti 2007; Demerouti et al. 2001) is useful for guiding our understanding of the consequences of prolonged work. This model stipulates that job demands are “physical, social, or organizational aspects of a job that require sustained physical or mental effort and are therefore associated with certain physiological or psychological costs” (Demerouti et al. 2001, p. 501). Examples of job demands include physical demands, emotional demands, and work pressure. Job resources, on the other hand, refer to physical, psychological, social, or organizational aspects of the job that facilitate achieving work goals or serve to reduce job demands and the associated physiological and psychological costs. Examples of job resources include supervisor coaching, having clear expectations of one’s work role, and autonomy. This model is consistent with Karasek’s (1979) job demands/control model, which indicates that job strain is likely to result from working in a job characterized by high levels of demands (e.g., workload, time pressure) and low levels of job control (i.e., autonomy and decision latitude). However, the job demands/resources model is broader and describes aspects of one’s job that facilitates work motivation and achievement of work goals beyond just job control. Based on the job demands/resources model, workers are less likely to experience deleterious effects of work and more likely to benefit from work if job demands are low or resources are available to buffer against negative job demands.

It is important to consider how job demands/resources model fits into decisions to work longer. The retirement literature indicates that workers may choose to leave work as a result of either “push” factors, “pull” factors, or some combination of both (Shultz et al. 1998; Barnes-Farrell 2003). Push factors refer to negative aspects of the work environment that may “push” one out of the workforce (e.g., work in stressful environment; low levels of job satisfaction), whereas pull factors refer to positive aspects of the retirement role. Rather than consider decisions to *leave* work, this chapter focuses on working longer and consequences of continued work. We

argue that workers are “pushed” to continue working primarily due to economic factors, such as to earn wages and/or employer-provided benefits (i.e., retirement, health insurance). This is particularly the case when an individual does not have control over his or her work situation and experiences job lock—a preference to retire, but a need to continue working either for pay, insurance benefits, or both. In addition, we purport that workers are “pulled” toward work because they derive meaningfulness or satisfaction from their work, are involved in work with desirable job characteristics (e.g., lower job demands, higher levels of control), and other resources (e.g., social support). In other words, workers are pulled to remain in the workforce if they are not seeking to leave unpleasant work situations and/or they are not enticed by more desirable activities in non-work roles.

In order to consider the impact of work on older adults, directions for interventions, and issues with regard to sustainable working lives, it is critical to understand *why* people work. Next we describe the economic, health and psychological factors related to work among older adults.

15.2 Reasons for Working Longer

15.2.1 Economic Reasons

Economic considerations are paramount in decisions to work or not. Government and employer-provided pensions appear to have significant impacts on retirement behavior. From a policy standpoint, it makes intuitive sense to have retirement age more in line with increases in longevity (van Solinge and Henkens 2010). As a result, changes to some government pensions (e.g., U.S. Social Security) have been enacted to encourage workers to delay claims retirement benefits. At the present time, the U.S. Social Security Administration is also considering policy changes that might *further* increase the retirement age for receipt of full benefits.

Since the late 1990s, many employers in the U.S. have changed the structure of pension plans to shift the savings burden to employees. The proportion of *defined benefit* pension plans (i.e., in which individuals receive a certain dollar amount monthly based on age, years of service, etc.) has been vastly reduced and replaced by *defined contribution* plans (e.g., retirement savings accounts in which employees and sometimes employers contribute money with the value of accounts fluctuating based on how money is invested). Defined contribution plans are more vulnerable to the economic cycle, and some retirees in the recent Great Recession found themselves with lower retirement wealth than would have been realized without the market downturn (Gustman et al. 2011). Such wealth losses appear to have encouraged some workers to remain in the work force longer than anticipated (McFall 2011). Thus, the shift in pension plan type provides some economic incentives for employees with a pension plan to remain in the workforce—to continue saving for retirement and postpone spending down retirement savings.

Another reason why individuals may be motivated to continue working, particularly in the U.S., is to obtain employer-provided health insurance benefits. Prior to the U.S. Affordable Care Act and recent changes to U.S. health insurance policy, 90 % of individuals with private health insurance obtained coverage through their employment or employment of a family member (Gruber and Madrian 2004). Job lock, or the notion that an individual would prefer to retire but continues working in order to obtain income or employer-provided health insurance coverage (Benjamin et al. 2008), is an important concern for understanding employer-provided health insurance and labor mobility in the U.S. Older workers, and particularly those who are less healthy or more in need of healthcare, may feel pushed into continuing to work in a job that offers health insurance if insurance would otherwise not be available, be very expensive, or offer less coverage (though the recent implementation of the U.S. Affordable Care Act may alter this in the future).

15.2.2 Health Reasons

Health limitations are a major reason for retiring, yet recent trends in better health at older ages may provide justification for encouraging longer working lives. A line of research by health economist David Cutler and colleagues demonstrates that there is substantial work capacity at older ages in the U.S. (Cutler et al. 2011). Weir (2007) compared the health status of early Baby Boomers (born between 1948 and 1953) to earlier cohorts. Objectively, looking at the number of health conditions and physical limitations, Boomers' health is not any better or worse than a comparable age group in an earlier cohort. However, subjectively, early Boomers rate their health lower. Relative to earlier cohorts, Boomers are less likely to smoke but have higher rates of obesity. Specifically, obesity rates are 7 % higher for men and 10 % higher among women. Obesity increases the prevalence of diabetes and is also related to conditions that can affect work status, including arthritis, difficulty with mobility, and joint pain. Prevalence of self-reported pain and pain-related activity was also higher among the early Boomers. Initial evidence, based on data collected in the 2004 wave of the Health and Retirement Study (HRS) indicates that these health conditions should not deter Boomers from expectations of working longer (e.g., Maestas 2007). According to Weir (2007), retirees are physically able to work longer. However, additional research is needed to follow health and work trajectories to better understand long-term trends, as well as to consider differences by occupation and industry type.

15.2.3 Psychological Reasons

In addition to a number of economic reasons to continue working, many are "pulled" to remain in the workforce for psychological reasons. For example, Barnes-Farrell (2003) described four factors related to the retirement decision process beyond health and wealth: job attitudes, job conditions, organizational climate, and societal

pressures. In this regard, the job demands/resources model can help define key work environments that may enhance older workers' psychological experiences and motivate continued employment. Another reason for choosing to work longer is that work provides a source of psychological well-being. In other words, working may help individuals maintain their sense of identity, may be perceived as meaningful, and can provide a source for social relationships, connections, or social support.

Many individuals derive satisfaction or a sense of purpose by working. Some researchers have pointed to generativity as a motivation for continued work (Templer et al. 2010). Generativity refers to "having opportunities to share one's knowledge and experience with younger generations" (Templer et al. 2010, p. 481). Harpaz and Fu (2002) as well as Steger and colleagues (e.g., Steger and Dik 2009) have also highlighted the pursuit of meaningful work as an important reason for working. Steger et al. (2012) defined meaningful work in terms of three dimensions: finding positive meaning in work, identifying work as a primary route to finding meaning in life, and perceiving work as beneficial for the greater good.

Recently, Kanfer et al. (2012) proposed an organizing framework for understanding work motivation among older adults. They developed a person-centered approach, explaining motivation and goals for individuals at work, to work, and to retire. These goals take into account multiple reasons for working, including financial, social, personal, and generative (Dendinger et al. 2005; Mor-Barak 1995). We argue that, among those individuals who do not feel pushed into working longer, psychological factors are an important motivator that pulls individuals into prolonged employment.

15.3 Who Is Working Longer?

Before we can determine the consequences of prolonged work, it is helpful to understand the characteristics of older individuals more likely to remain in the workforce. Therefore we examined data from the U.S. Health and Retirement Study (HRS) to understand demographic, economic, health, work, and psychosocial variables related to working vs. not working at older ages in the U.S. The HRS is a nationally representative longitudinal panel of adults in the U.S. aged 51 and older, therefore serving as an excellent source to investigate this issue within the U.S. To identify which factors are associated with adults' decisions to delay retirement and remain in the labor force, we selected participants who were between the ages of 62 and 65 in 2010, ages where 2010 work status reflects the decision to continue working versus taking partial or full U.S. government (Social Security) retirement income benefits ($n=1,988$). Next, we retained only those respondents who were in the labor force in 2008 ($n=959$), of which 69.2 % were working full-time, 12.6 % were part-time employed, 1.8 % identified as partially retired (self-identified as retired, but still engaging in paid work), and 16.4 % were unemployed and looking for work. Individual's work status in 2010 was coded as 1 = working (includes full-time, part-time, unemployed and looking for work), and 0 = no longer in the labor force. Individuals who were missing data on 2010 work status were not included,

Table 15.1 Descriptive statistics for workers age 62–65 in 2008 and comparison between those working and not working in 2010

	Total sample	Working in 2010	Not working in 2010
% women	54.9	54.6	56.0
% high school or more	57.8	60.6	48.6***
% married	70.3	70.6	69.4
2008 household income	8.62 (1.60)	8.65	8.53
2010 household income	10.99 (1.06)	11.12	10.56***
2008 household wealth	12.30 (1.52)	12.39	12.03**
2010 household wealth	12.26 (1.62)	12.35	12.0**
2008 individual income	10.33 (1.07)	10.37	10.17*
2008 spouse income	10.22 (1.13)	10.27	10.05
2010 spouse income	10.23 (1.20)	10.29	9.98*
2008 individual work experiences			
Hours worked per week	37.78 (13.76)	38.32	36.0*
Physical effort in job	2.86 (1.13)	2.93	2.63**
Stress in job	2.27 (0.86)	2.28	2.24
Tenure at job	12.18 (11.34)	12.31	11.73
Longest job tenure	19.24 (10.10)	19.10	19.70
Health			
2008 self-rated health	3.47 (0.98)	3.56	3.16***
2008 change in health	2.08 (0.51)	2.04	2.20***
2010 self-rated health	3.47 (0.97)	3.56	3.19***
2010 change in health	2.09 (0.54)	2.06	2.16*
2008 count of chronic illnesses	1.64 (1.22)	1.16	1.90***
2010 count of chronic illnesses	1.85 (1.29)	1.75	2.17***
2008 difficulties with ADL's	0.07 (0.38)	0.06	0.13
2008 difficulties with IADL's	0.14 (0.43)	0.14	0.16

Source: Authors' computation of data from the 2008 and 2010 waves of the Health and Retirement Study. N=916 individuals age 62–65 in 2008 who were working and completed the HRS psychosocial questionnaire

NOTE: Household wealth and income variables were adjusted for marital status differences, where households with married partners were divided by 1.62 to be comparable to single households (Citro and Michael 1995). Due to distributional violations, all household and individual-level wealth and income variables are log-transformed. Values for spouse variables are only for the subset of the sample that are married and with spouse data on the key variables. A higher score in Change in Health (2008; 2010) indicates health is worse compared to 2 years ago. Indicators of significance reflect group differences in the means between working vs. not working in 2010

* $p < .05$; ** $p < .01$; *** $p < .001$

resulting in a final sample size of $n=916$. The final sample identified 76.4 % as continuing to work in 2010. Of those who were no longer working in 2010, 60.7 % were full-time employed in 2008, 12.5 % were part-time employed, 22.7 % were partially retired, and 4.2 % were unemployed and looking for work in 2008. Table 15.1 summarizes the final sample demographics and key variables of interest.

Our results support previous findings which indicate that those individuals who chose to work longer in 2010 were more highly educated, had greater income and wealth, and were in better health compared to those who were no longer working.

In addition to the typical variables used to examine retirement decisions, such as finances, health, and demographics, we also examined a variety of psychosocial constructs that may play a role in the decision to continue working. Specifically, a sub-set of the 2008 HRS sample received a psychosocial questionnaire containing questions about perceived work ability (i.e., workers' perceptions of their capacity to meet their overall, physical, mental, and interpersonal work demands; Ilmarinen and Rantanen 1999; McGonagle et al. 2014) and job lock. The job lock items specifically asked, "Right now, would you like to leave work, but plan to keep working because: (a) you need the money (Y/N); and/or (b) you need the health insurance (Y/N)? Work ability assesses the extent to which individuals perceive their ability to meet the overall, physical, mental, and interpersonal demands of their work. In a series of logistic regression analyses, we first examined whether perceived job lock and work ability in 2008 predict the likelihood of deciding to work in 2010, over and above demographics, finances, and health.

Results indicate impressive associations of job lock and work ability with the later decision to remain working (Fisher et al. 2013). Specifically, individuals who reported that they were working in 2008 to keep health insurance (job lock) were significantly more likely to be working in 2010 (Odds Ratio=1.15; $p < .05$). In addition, every increased unit in perceptions of work ability in 2008 was associated with greater odds of working in 2010 (Odds Ratio=1.07; $p < .001$). Importantly, the change in variance accounted for by job lock and work ability ($\Delta R^2 = .08$) is greater than that attributed to demographic, financial, and health controls ($R^2 = .07$). These results provide evidence for a variety of push and pull factors linked to working longer.

15.4 Positive Consequences of Working Longer

Work can provide a number of benefits for individuals. Some of these benefits are the direct result of work (e.g., economic and psychological gains), and others are provided by way of job resources described by the job demands/resources model.

15.4.1 *Economic*

There appears to be a clear economic benefit to working longer, including earned wages, and possibly employer-provided health insurance and retirement plan contributions. For example, Johnson (2005) showed that the average unmarried man in the U.S. could nearly double his annual income at age 75 by retiring at age 70 instead of age 62. Furthermore, some countries have made changes to public pensions that essentially removed economic penalties to work until later ages. In the U.S., the percentage increase for delaying benefits beyond normal retirement age

to age 70 has increased in a way that makes the policy more age-neutral (Burtless and Quinn 2002) and actuarially fair. Working longer provides additional financial resources so that individuals do not need to fund a lengthy retirement. Those who retire in their early 60s but live until their mid-80s (based on current life expectancy tables) may be at risk for not having enough income in their older age (Burtless and Quinn 2002). Thus, working longer confers a financial advantage through benefits workers receive for delaying Social Security claiming, the longer amount of time for potential savings to grow, and the shorter amount of time retirement saving must last.

15.4.2 Well-Being

Another benefit to working is better health and well-being. For example, Calvo (2006) found that working appears to be associated with higher life satisfaction and health. He examined work and well-being in the HRS between 1998 and 2002 and sought to determine whether health resulted in cessation of work or whether continuing to work resulted in better health and well-being. After controlling for baseline health in 1998, he found that being employed 4 years later is associated with a 6 % reduction in the report of fair or poor health. Reports of negative mood were 2 % lower for those who were working compared to those not working. Results were moderated by type of work, such that working in undesirable jobs was not associated with the positive effects of paid work on mood indicators and mortality. Results indicated that in some cases, working in later life is associated with many benefits and helps individuals maintain their level of well-being.

15.4.3 Social Support

Work can serve as an important source of social connection or social support (Moen et al. 2000; Elovainio et al. 2003). Engagement in productive and social activities has been found to be beneficial to physical health and psychological well-being. Part of the enhanced well-being observed in those who continue to work may be a result of maintaining social relationships with people at work. Although retirement offers the prospect of spending more time in leisure pursuits that may involve social connections, such as volunteering or socializing, formal social connections associated with work may offer a “built in” network for those with fewer informal connections (Lancee and Radl 2012). In addition, the United States Bureau of Labor Statistics reports that only 24.4 % of adults aged 65 and older engaged in volunteer work in 2012, indicating that the potential loss of a social network from retirement is likely for the majority older adults.

15.4.4 Cognitive Activity

Work can also provide a source of cognitive activity. Rohwedder and Willis (2010) used data from the HRS, the English Longitudinal Study of Ageing (ELSA), and the Survey of Health, Aging, and Retirement in Europe (SHARE, a study of 11 European Union countries) in 2004 to determine whether retirement leads to cognitive decline. By examining comparable measures of episodic memory in relation to labor force participation among people in their 50s and 60s cross-nationally at a country-aggregate level, they concluded that early retirement has a significant negative impact on cognitive functioning. A few studies examining inter- and intra-individual differences have demonstrated that involvement in jobs with higher mental demands (i.e., characterized as being cognitively complex) is related to higher levels of cognitive functioning in older adulthood and protective against cognitive decline post-retirement (Finkel et al. 2009; Fisher et al. 2014). For example, even after controlling for education and SES, working in occupations characterized by high levels of cognitive complexity is associated with not only higher levels of cognitive functioning in later life, but a slower rate of cognitive decline. Although individuals with higher levels of cognitive abilities are more likely to select occupations characterized by being cognitively complex, empirical evidence is mounting to suggest that such work may be protective to some degree against cognitive decline. Moreover, empirical research to date regarding the relationship between age and job performance has not found empirical support for the notion that older workers perform their jobs any worse than younger workers (Ng and Feldman 2008).

15.4.5 Identity

Continued work participation, either based on paid or volunteer work, serves to provide an individual with a source of identity with a work role. For individuals whose identity is strongly associated with his or her work (i.e., has a high level of job involvement), this may be particularly important. Another way in which identity comes into play is in regard to a worker's self-concept or identity. For example, Barnes-Farrell (2003) pointed out that individuals are motivated to maintain a positive self-image or identity, which may have an impact on his/her retirement intentions. Zaniboni et al. (2010) found that having work identity was negatively related to intentions to retire fully from one's job. Taylor and Shore (1995) studied predictors of planned retirement age among a sample of workers from a multinational firm. They found that in addition to age and health, workers' belief in their ability to adjust to retirement was a significant predictor of planned retirement age. Specifically, individuals who doubted their ability to adjust to retirement planned to retire at a later age. These results are consistent with the notion that individuals with a high level of job involvement may wish to retire later.

15.5 Negative Consequences of Working Longer

While there are benefits to continuing to work, there may be some negative consequences as well, particularly at older ages. Many of the negative consequences result from job demands, particularly when resources are not available to buffer negative effects of high job demands. We review each of these potential consequences next, and then discuss possible interventions.

15.5.1 *Job Lock*

Although analyses suggests that there may be significant untapped work potential in the older population (e.g., approximately 9 years on average, as indicated by Weir (2007)), many analysts express concern over subgroups who may be at risk of deleterious consequences as policies to prolong working lives are considered. For example, those with lower income and wealth may feel locked into working longer (with no choice) and may also be likely to be in certain types of jobs or industries that are not beneficial to health or may even be detrimental. In addition, individuals with lower levels of SES have lower life expectancies, so policies, such as those in the U.S., to increase the age for receiving full Social Security retirement benefits (which is likely a large proportion or the only source of retirement income for these individuals) may inadvertently harm those individuals at greatest risk. This may manifest itself in the form of worse health, lower levels of well-being, and lost time spent in jobs that are disliked, unhealthy, and/or unfulfilling.

15.5.2 *Burnout*

Job-related burnout is a costly occupational health issue. It is defined as an affective reaction that results in the “gradual depletion over time of individuals’ intrinsic energetic resources, including the components of emotional exhaustion, physical fatigue, and cognitive weariness” (Shirom 2011, p. 223). Older workers may be at higher risk of burnout associated with their longer job tenure. Notably, burnout is highly correlated with depression (Schaufeli and Enzmann 1998) and may negatively impact a worker’s health by increasing the risk for cardiovascular disease as well as musculoskeletal disease (Melamed et al. 2006). In some cases burnout is similar enough to chronic fatigue that workers may file employment compensation claims on account of job burnout, and it may be a source of work disability (Shirom 2011). Job burnout, which has been significantly associated with job control and demand/resources fit (Maslach et al. 2001), is a particular risk for those older workers pushed into continued employment due to economic considerations.

15.5.3 Injuries

A potential risk of working longer is increased risk for injury or ill health due to participation in work. Older workers appear to have higher fatality rates associated with occupational injuries compared to younger workers (Grandjean et al. 2006), and disabilities in older workers may put them at increased risk of occupational injury (Zwerling et al. 1998). Using two waves of HRS data from 1992 to 1994, Zwerling et al. (1998) found that poor hearing and poor eyesight were particularly associated with work-related injuries among older workers. Moreover, older workers who experience occupational injuries may be forced to remain in jobs they would prefer to leave. Benjamin et al. (2008) investigated the role of occupational injury in creating job lock. Respondents over age 54 who had experienced a recent injury ($n=3,004$) as registered in the New Hampshire Department of Labor injury registry were sent a questionnaire with a range of information and an indicator of job lock: “Right now, would you like to leave work altogether but plan to keep working because you need the money or health insurance?” More than half of those surveyed reported being in a state of job lock, with the percentage increasing with more severe injury.

The higher prevalence of chronic health conditions, musculoskeletal problems, and age-related changes (declines) in fluid cognitive abilities, hearing, vision, and reaction time *suggests* that older workers are at a higher risk of health problems and occupational injuries. This suggests that older workers in physically demanding jobs may not have the resources needed to cope safely. However, Grosch and Pransky (2009) challenge the notion of the inevitability of poor health in older age and its negative impact on work. For example, older workers are only likely to experience problems due to age (i.e., being “age-impaired”) when a job’s task requirements exceed a worker’s abilities (Warr 1994). Workers’ physical and cognitive abilities may decline a great deal before such decline interferes with or exceeds workers’ job demands. Workers may be able to adapt or transfer to other work activities for which they are better suited (Warr 1994). The type of job likely makes a big difference. Calvo (2006) notes that the impact of increasing the age of benefit eligibility for Social Security could be bad for workers in undesirable jobs, “that have excessive demands or otherwise cause dissatisfaction....the type of jobs that people would probably not choose voluntarily” (Calvo 2006, p. 3). His analysis of HRS data from 2000 showed that about 15 % of those working were in undesirable jobs. Another hypothesis posits that older workers may not experience health problems caused by working longer because of selection effects. In other words, those who are still working beyond traditional retirement age are likely to be healthier and more able compared to those who aren’t working. Our own analysis found support for this (see Table 15.1).

15.5.4 Less Non-work Time

Time is a limited resource, and time spent working is time not spent doing other activities or involved in other domains. Rabinowitz and Hall (1981) found that older workers reported lower levels of job involvement compared to younger workers. One possible explanation they provided for these findings was a preference for involvement in family or leisure activities. In a study of U.S. military personnel, Smith et al. (2011) found that individuals with higher levels of community embeddedness were less likely to re-enlist and, among those eligible for retirement, more likely to retire compared to individuals with less community involvement.

One consequence of working longer in paid employment is having less time available for performing volunteer work, which has implications for the community or society at large that benefits from volunteerism (Griffin and Hesketh 2008). Aside from a societal cost, additional years spent in paid work, particularly among individuals who feel locked into their jobs, may be an opportunity cost for many individuals who would rather engage in different activities that provide satisfaction and enhance well-being. Many individuals derive a great deal of satisfaction, and indeed, have a need for involvement in activities other than paid work.

Caregiving is another role often performed by older adults, including caring for elderly parents, spouses, or grandchildren. Continued work may result in less time available for caregiving or increased strain among caregivers who are juggling work and family demands (Schulz and Martire 2009). Prior research has demonstrated clear gender differences with regard to work, family, caregiving and retirement. For example, men with family responsibilities are more likely to continue working whereas women are more likely to reduce or eliminate work in order to perform caregiving roles (Dentinger and Clarkberg 2002). If policies are enacted to delay receipt of partial or full Social Security benefits, it is difficult to predict how potential caregivers will make decisions about work and family responsibilities and whether women will be particularly disadvantaged financially due to their greater likelihood of reducing work to provide care.

15.5.5 Age Discrimination

The U.S. Age Discrimination in Employment Act (ADEA) was passed in 1967 to protect workers age 40 and older from discriminatory employment practices. In 1986 it was amended to eliminate mandatory retirement ages for all but a few occupations (e.g., those involving public safety, including airplane pilots and federal law enforcement). In spite of this legislation, age discrimination is still a prevalent and costly problem, with more than 22,000 cases filed each year with the U.S. Equal Employment Opportunity Commission (EEOC). This represents more than 20 % of

all EEOC claims since 2008 and \$91.6 million in monetary benefits in 2012 alone, not including benefits obtained through litigation (EEOC 2013).

A series of meta-analyses over the last two decades (Bal et al. 2011; Finkelstein et al. 1995; Gordon and Arvey 2004) concluded that there is empirical evidence for negative age effects on judgmental decisions such as hiring and potential for advancement. These studies suggest that there is disparate treatment in various workplace judgments, perceptions, and decisions due to target age, though often moderated by contextual factors, such as the occupation, organizational norms, and the legal environment. In 2006, the United Kingdom passed legislation to forbid discrimination on the basis of any age. However, other countries have not necessarily established such policies (Finkelstein and Farrell 2007), thereby permitting (and sometimes possibly encouraging) employment decisions on the basis of age. In sum, this provides evidence that age discrimination may be a challenge for older working adults.

15.5.6 Job Insecurity and Unemployment

One potential stressor for older workers is job insecurity (Jex et al. 2007; Sverke et al. 2002). In the current economic climate with high rates of unemployment, many workers may experience concern about job loss. Jex et al. (2007) suggested that levels of job insecurity may be even higher among older workers compared to younger workers because they may be pushed into working to obtain financial resources provided by employment (e.g., wages, retirement plan contributions, insurance) and fewer prospects for re-employment. Some older adults may not be working but rather looking for work, and experience more difficulty obtaining work (noted in the previous section regarding evidence of age discrimination). Although many older workers had plans and intentions to work longer, unemployment rates among both men and women age 55–64 and 65+ reached the highest levels during the Great Recession since such unemployment records were first recorded in 1948 (Johnson and Mommaerts 2010). Thus, one of the consequences of planning to work longer is that economic conditions do not always permit it.

Although many older workers spent a considerable amount of time looking for work, a high proportion of older workers have opted for early retirement instead (Wheaton and Crimmins 2013). For example, Social Security claims among individuals age 62 and older were 25 % higher in 2009 compared to the prior year. Although some increase in this proportion may be attributed to more Baby Boomers reaching this age, demographers indicated that a high proportion of individuals who were unemployed and unable to find work were forced into retirement (Johnson and Mommaerts 2010; Wheaton and Crimmins 2013). For those in poorer financial situations, the option of early retirement is not an ideal option.

15.5.7 Moderators

As described, prior research is replete with a number of potential positive as well as negative consequences associated with work among older adults. However, a great deal of empirical research highlights important variables which serve to moderate the relationship between work status and consequences of working longer. While there are a range of potential moderators, we address three we consider highly important.

The most significant potential moderator is socioeconomic status because it determines so many other important life circumstances as well as psychological and health outcomes that can affect the decision to work and the potential consequences of working longer. Indeed, many of the studies reviewed above demonstrate that many of the negative consequences of longer working lives are likely to be experienced by individuals with lower socioeconomic status, which is also related to working in more blue collar, physically demanding jobs that typically don't offer workers as much control or flexibility compared to white collar jobs.

A sense of personal control has been shown to be lower among those with lower socioeconomic status and may also be a significant factor related to well-being. Herzog et al. (1991) found that individuals' whose level of labor-force involvement (work status and number of hours worked) matched their personal preferences reported higher levels of physical and psychological well-being than do those whose level of labor-force involvement is constrained by other factors. This is consistent with the demands/resources model, as well as prior research by Barnes-Farrell (2003) and Heckhausen and Schulz (1995), who indicated that personal control is an important determinant of well-being in the retirement process. It matters less whether an individual is working or retired and more whether that status matches their preference or whether they are able to exercise personal control over the decision. The importance of control is also evident based on research examining job lock and well-being. Fisher et al. (2013) found that workers age 62–65 who reported working due to economic necessity (i.e., job lock) reported significantly higher levels of life satisfaction following retirement compared to individuals who had been working but were not job-locked.

Lastly, the extant occupational health literature shows that the physical demands of work vary by occupation with blue collar work being associated with great physical demands. This may be the most significant factor influencing the decision to remain working. Workers must be extraordinarily fit to remain long in jobs involving heavy lifting and equipment and other intense physical demands. As our discussion of injuries indicated, older worker may be at exceptionally high risk in such occupations.

15.6 Directions for Interventions

Given the wide range of issues discussed so far, it is clear that although there are benefits to working, interventions may serve to mitigate the negative impact of work. Interventions may promote not only longer but healthy and productive work

lives. A recent review of interventions designed to promote longer working lives indicated that surprisingly very few methodologically sound interventions have been conducted, and significantly more research is needed to design and systematically evaluate such interventions (de Lange et al. 2013). Our focus in this section will be on the measures that can be taken by firms and other organizations to promote longer work tenure and, toward the end of the section, by older individuals to prepare themselves for a world that will need their labor. The interventions we propose are grounded in the job demands/resources model (Demerouti et al. 2001). Specifically, interventions should center on adding or strengthening resources to help workers handle the physical, mental, or emotional demands of their job.

Research in occupational health psychology has pointed to the importance of changing the job or work environment rather than changing the individual (Semmer 2011). Job design/re-design, which involves changing the organization of work, is a direct way to reduce high job demands and/or develop or incorporate resources to facilitate work or reduce the negative impact of high job demands. Job design/re-design may involve modifying tasks, changing or reducing job demands or workload to match an individual's resources (e.g., knowledge, skills, and abilities). Modifying work to increase workers' autonomy and sense of control over what they do, how they do their work, and when and where they work may lead to more positive outcomes (Karasek 1979). Incorporating flexibility in the time and location of work may help workers balance non-work responsibilities (e.g., caregiving) in a way that allows them to remain in the workforce (Bulger and Fisher 2012; Schulz and Martire 2009). Flexible work arrangements as well as options for part-time work may have a positive impact on health as well facilitate the attraction and retention of older workers (Wang et al. 2013).

In terms of the physical work environment, ergonomic redesign holds promise for promoting longer work lives. Garg (1991) defines ergonomics as "the science of fitting the task to the worker" (p. 1) and calls for carefully collected longitudinal data to determine the most beneficial design to help older workers remain in their jobs without risking their health. More recently, Schwerha and McMullin (2002) conducted a study to link demographic data to ergonomic and human factors data and identified key factors in enhancing ergonomic design in various labor sectors. Our recommendation, following Costa et al. (2011), is to measure work ability to identify situations where workers' work ability is being challenged, which can point to potential ergonomic and other human factors interventions.

In addition to changing job characteristics, another approach toward improving the workplace is to provide a supportive work environment. This includes establishing supportive workplace policies and norms, as well as training or otherwise encouraging supervisors and coworkers to behave in supportive ways. The literature is replete with studies that have demonstrated the importance of social support as an important moderator in the stress process (Viswesvaran et al. 1999). Social support from others in the workplace can go a long way toward minimizing or buffering the effects of many workplace stressors.

Although empirical research has demonstrated that organizational interventions can be successful, modifications to the work environment may have unintended consequences (Semmer 2011). Organizations are comprised of complex social

structures. As a result, it is important to consider the ways in which modifying aspects of the workplace may play out and therefore proceed with caution. In addition, proper evaluation ought to be conducted to assess the effectiveness of workplace interventions and any unintended effects.

With regard to minimizing negative age stereotypes and age discrimination, Finkelstein and Farrell (2007) suggested that older workers ought to play up their experience as well as develop a keen sense of self-awareness. Organizations ought to provide and individuals should seek training opportunities to maintain or develop new skills. This is particularly important given the rapid changes in technology that permeate multiple industries and occupational sectors. Being able to maintain skills necessary in today's workforce may help older workers' employability, work ability, and performance (McGonagle et al. 2014).

Lastly, we note that a focus on interventions at the worker and workplace level represents what House and Williams (2000) referred to as "downstream" effects. It is also important to take a macro perspective and consider "upstream" effects on worker health and well-being, and therefore interventions at a broader government or societal level (Burgard et al. 2009; House et al. 2009). For example, interventions could focus on social, political, or economic policies that could alter individuals' need to work at older ages, or resources available to those who continue working.

15.7 Summary and Conclusions

To conclude, the review and analyses presented in this chapter highlight the complexities inherent when considering the factors associated with working longer and potential consequences. Although evidence suggests that working beyond typical retirement ages is associated with financial, health and psychosocial benefits, for some individuals the decision to work longer may actually be detrimental, particularly in jobs with high demands and without the appropriate resources to support or cope with those job demands. The life-cycle model in economics predicts that abundant retirement savings should lead workers to retire at the normal retirement age, if not earlier, and the motivation to continue working should be stronger for individuals in lower socioeconomic groups. However, recent research and our own analysis of the HRS data suggest that it may be more highly educated, higher income workers who are more likely to work longer. It may also be that case that higher earners are in career jobs, such as white collar professions, that may lend themselves more easily to working longer. Therefore we recommend that more interventions be targeted toward blue collar workers or those in jobs characterized by higher work demands and fewer resources to reduce the negative consequences associated with work.

As new policies aimed at extending working years are proposed, we recommend considerations for both the positive and negative consequences. With future work, particularly a growing need for well-designed intervention studies, better information about who should work longer and how to enable extended work lives will be

available. It is entirely possible that the consequences of working longer may be less likely to be related to *whether* people work, but rather *why* they work (motives) and the characteristics of the work they are doing (Wang et al. 2013).

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Part VI
Conclusions for the Future

Chapter 16

Conclusions for Policy, Practice and Research

Jukka Vuori, Roland Blonk, and Richard H. Price

16.1 Introduction

While people are living longer lives this increases pressures for developing longer working lives in a sustainable way. Through a life course perspective, we can see the economic value of preventive measures for promoting sustainable working careers and health. A more detailed description of the impacts of these work life developments on employees focused on the most critical career transitions and phenomena during the life course: the school to work transition, job insecurity, job loss, re-employment, and retirement.

In this last chapter we will summarize the conclusions that can be derived from the individual chapters into three main topic areas: (1) conclusions for policies for achieving more sustainable work lives, (2) conclusions for practice to support these policy recommendations and (3) conclusions for further research in this area to strengthen these efforts. We will then discuss how these three areas are closely inter-related and summarize the main conclusions.

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16.2 Conclusions for Policies

16.2.1 Policy Pressures Due to the Mismatch Problem and Global Competition

Modern companies in current global markets aim for increasingly flexible arrangements in their production systems. This includes flexible employment systems. While the work and employment environment in many parts of the world is becoming more unpredictable, a major challenge to policy initiatives for making working lives more sustainable is the so-called mismatch problem described by Price in Chap. 1. The required changes in policies, respective social institutions and services lag behind the changes that have already taken place in work life. High competition in the global economy and demands for productivity have contributed to the emergence of part time and precarious work with defective health and other problems and the associated insecurity in workers' lives.

At the same time, the organized educational and support systems of society are not functioning effectively enough. In many countries, this development has contributed to increases in job insecurity and youth unemployment, it has reduced retirement opportunities and increased economic hardship and depression among vulnerable workers. Governmental and private support systems including job training, economic support and programs for helping people negotiate job transitions are part of the answer. In some parts of the world there seems to be widening consensus for employer and governmental policies emphasizing employability and preparedness for work transitions integrated into the design of educational programs for workers, especially for those at greater risk, such as young workers, low-skilled workers, migrant workers etc.

Pressures from the global markets push for less secure forms of employment and less employment-related benefits for workers in developed countries, whereas workers in many developing countries do not even have the minimum amount of protection in their informal jobs, as demonstrated by Mannila in Chap. 2. It is important to notice that these two trends are closely linked in the global economy, as global firms often search for cheap labor costs as an important means of competition. As a result of these relationships, it may be difficult to combat deteriorating employment contracts in the developed labor markets without improving working conditions in the developing world at the same time.

16.2.2 Supporting Job Security and Youth Employment

De Witte, Vander Elst and De Cuyper describe in Chap. 7 how all this development leads to increased levels of job insecurity in developed societies. In Europe, a policy initiative called "flexicurity" has aimed at increased individual security by means of better coping within a more flexible labor market. Berglund describes in Chap. 9

how an example of this kind of system would include generous unemployment benefits combined with active measures for reemployment. For this kind of flexicurity to work in practice, the economy should be booming, because otherwise the state could not afford generous benefits and a multitude of active interventions. Without these expensive measures the negative effects of low job protection would prevail. Several years ago the flexicurity type system was implemented in Denmark, with an advanced adult education system, and this seemed to be an active ingredient in the temporary success of the model, emphasizing the importance of the life course perspective. In countries with less developed educational systems and smaller investments in labor market policies, flexicurity reforms may be highly risky for employees. They could result in flexibility with no security.

The current economic crisis has once again had a powerful impact on young job-seekers moving on from school to labor markets. For example, in the crisis-hit countries in Southern Europe, youth unemployment has soared to such levels that there has been even widespread concern regarding societal unrest. Akkermans, Nykänen and Vuori describe in Chap. 5, how young workers would urgently need more jobs that stimulate their life-long learning, growth, and employability. At the same time the demands for flexibility and career self-management have been increasing in labor markets. For these reasons, it is more crucial than ever for adolescents and young adults to have good opportunities to effectively prepare for, and successfully go through the transition to work and adapt to the challenging labor markets. In schools this would mean more career guidance, which emphasizes preparedness for difficult career environments in labor markets.

16.2.3 Combatting Harmful Consequences of Unemployment and Precarious Work

Global economic competition and corporate downsizing appears to create an accelerating stream of job losses. There is ample evidence that unemployment causes ill-health, but also that poor health may push people out of the workforce. Vinokur and Price describe in Chap. 10 how prolonged unemployment easily leads to discouragement, and that those who regain a job shortly after job loss recover relatively well from financial distress and depression. Therefore programs for recently unemployed workers should aim primarily at promoting their swift re-entry into the labor force. The longer unemployment continues, the more difficult the challenges for reemployment and health become. For many longer-term unemployed workers and workers with disabilities, efforts are needed to adapt job activities to their capabilities, and to adopt other primary preventive interventions to improve their health.

Sanders, Dorenbosch and Blonk demonstrate in Chap. 11, how employability could be made more sustainable for workers with lower-level education through targeted ‘maintenance’ of skills and motivation through training, job redesign and mobility. Many disadvantaged groups do not have easy access to sustainable employment. Research has mostly focused on the needs of the jobs and interventions

that prepare people for employment due to, for example, mental health reasons. However, in addition to the required practical support at workplaces, these disadvantaged workers would benefit from help in navigating the system and competing in job markets. Many people also have to leave their jobs due to longer term illnesses or other conditions. This leads to a considerable risk of exiting the workforce altogether in the longer run. Differences between the return-to-work rates of countries in Europe are considerable, as Burdorf and Schuring describe in Chap. 12. Active labor-oriented policies, together with compulsory legal instruments seem to support higher rates of return to their previous employers among those with limiting longstanding illnesses.

16.2.4 Policies for Job Retention

In many modern societies, an increasing proportion of employees retire due to depression, burnout, musculoskeletal or other disorders before their normal retirement age. Despite the fact that societies are planning and implementing measures aimed at longer working careers due to increasing retirement costs, employers are unwilling to employ older workers. Moreover, for many workers the financial necessity to continue in a demanding work environment may have detrimental effects on their health, which is described by Fisher, Ryan and Sonnega in Chap. 15. It may be better-educated employees who have more job retention possibilities, as they may still have high competence value for employers and can better negotiate their working environment and thus resist age discrimination.

The early exit of workers from the labor force means huge losses for many developed societies due to lost productivity and increased retirement expenses. Ahonen in Chap. 2 demonstrates how in modern societies with advanced social security systems, losses are even greater when middle-aged or young people, for example, receive disability pensions. In practice, however, it may be difficult to differentiate much between the economic values of different age-groups of labor force in the efforts to increase participation in work life. When we take the life course perspective, many other factors, such as health, education, skills, motivation and so forth, affect a person's work ability and productivity in labor markets. Consequently, efforts should be made to promote sustainable working careers in all age groups. In any case, the societal costs of early exit from the labor force are many-fold compared with the amount of money that has been invested in well-being at work at workplaces.

16.3 Conclusions for Practice

Sustainable and at the same time perhaps longer working careers can be promoted through a vast array of concrete practices. One way forward is to help people cope better with their career challenges and to adjust better to the rapidly changing

working world. It seems that as global economic competition makes societal support systems slimmer, people are expected to take on more responsibility in their own careers in increasingly unpredictable environments. However, not everyone keeps up with this development and with short-term individual support. It seems that an increasing proportion of people start to have precarious employment relationships for longer periods of time. This is especially the case for employees with lower level qualifications and for some other risk groups. They need longer term support for obtaining qualifications, which would make them more employable. Another main practical route in supporting more sustainable working careers is to develop school and work environments in such a way that they would support more sustainable careers and prevent school dropout or marginalization from labor markets. Below we will further discuss these routes.

16.3.1 Enhancing Preparedness for Career Transitions and Management

At the individual level, interventions increasing employees' sense of control over their employment situation is important in combating the negative consequences of job insecurity and precarious employment. In work organizations, efficient communication and giving employees the opportunity to participate in decision-making during organizational changes enhances employee control. However, this is often not the case and employees have to cope with the uncertainty by themselves. Anxiety associated with insecure employment situations can also be seen as a signal for people to plan ahead and take action to avoid possible negative outcomes as Sweeny and Ghane describe in Chap. 8. It seems, that one effective way to respond to this kind of anxiety is to prepare in advance for the potentially negative outcomes. Several empirical RCT studies regarding various transitional phases during the educational and working careers of people have demonstrated how preparedness for these critical career transitions can help in crossing them successfully and how this is also manifested in better mental health. These RCT studies are described in Chap. 4 for young students making career choice, in Chap. 5 regarding the school to work transition, in Chap. 10 for the unemployed workers seeking reemployment and in Chap. 13 both for senior employees making decisions regarding the duration of their careers and for parents returning from family leave. Preventive career interventions implemented at various transitional phases of the working career seem to especially benefit students and employees at greater risk. Transitional career phases such as choosing between the academic and vocational track, the school to work transition, job loss and reemployment, retiring due to disabilities, return to work and retirement, are all favorable situations for preventive interventions. As people make important decisions regarding their future career during these transitions, getting them to make better decisions through interventions seem to have a long-term beneficial effect on their future career and health.

In work life, career and job counselling is mostly afforded to upper-level white-collar employees. Middle- and low-level white-collar employees and blue-collar workers, who would benefit most from this kind of guidance, receive even less of this than before. This is partly because employer contracts are less stable and employers are not willing to invest too much in unpredictable employee relationships. However, it would seem both possible and feasible to enhance employees' preparedness, confidence and resilience resources through cost-efficient organizational practices, such as group training, as demonstrated by Vuori and Toppinen-Tanner in Chap. 13.

16.3.2 How to Promote Employability and Early Careers of Young People

Many young workers with low-level or suspended education are in such precarious employment situations that in order to obtain more sustainable working careers they would need more competencies in boosting their employability. For them it would be important to find ways in which to effectively develop their competencies and career managing skills during their early career in order to achieve a productive and sustainable career. It seems, that they could benefit of challenging but clearly defined tasks in their jobs (see Chap. 5).

Success in organizational socialization processes has a major impact on sustainable working careers for young newcomers. Wiese and Knecht describe in Chap. 6 how realistic job descriptions, sufficient organizational job-skill training and in particular support from supervisors is crucial for the successful socialization and well-being of young workers. Many young employees, especially women, face challenges in balancing work and family demands. In this regard, embedding organizational socialization into the broader life context of employees would be more in accordance with the life course perspective of sustainable working careers and would also increase the likelihood of enduring organizational commitment.

16.3.3 Developing Work Environment for More Sustainable Careers

More sustainable careers can also be promoted by making the work environment more adequate and supportive at different career phases. The school environment can be considered the work environment of students as Salmela-Aro and Vuori in Chap. 4 point out. For young people starting their career, school burnout and drop-out could partly be prevented by enhancing student-environment fit by developing

resources in the educational environment. This would mean changing the school environment in developmentally appropriate ways in accordance with the maturation of students.

In the working life, the work environment can be a challenge for employees with possible restrictions or deficiencies in work ability. These employee groups may be low-skilled workers, other disadvantaged groups of workers or, for example, older employees in strenuous jobs. Sustainable employability for low-skilled workers or other disadvantaged groups could be promoted through redesigning jobs and work processes or the internal and external mobility of workers (see Chap. 11).

For older workers with strenuous jobs, part-time work would promote sustainable working careers and job retention. It also seems that improving the work-life balance by supporting individual control over working hours would be a central factor in enhancing both work ability and the attractiveness of work life among older workers in strenuous jobs. As Härmä in Chap. 14 demonstrates, good control over working hours is related to good subjective health, lower sickness absence and a lower risk of cause-specific disability pension. Strenuous working hours may be rearranged in a more innovative way to extend individual working careers. Shortening average working hours decreases fatigue and improves recovery among older workers.

16.4 Conclusions for Research

Due to the current large scale changes in peoples' life expectancies and pressures for more productive working careers, especially in developed countries, there is an urgent need for more research on careers, health and productivity using life course perspectives. The effects of life course changes could be examined from the viewpoint of workers' multiple careers or life domains, e.g., workers in an occupation, parents, members of communities and so forth (see Chap. 1). This may also be seen as a need for broader definitions of employees' careers depending on their life situation. When people have children or get older, their goals regarding their career may also change. A better understanding of these changes in people's lives due to rapidly changing societies would help us begin to design sustainable policies and suitable interventions for both employees and workplaces.

In developing countries, research needs are very different because labor markets and employees are not well defined (see Chap. 2). People work in informal labor markets and it is difficult to find opportunities for controlled research in this situation. If informal workers could be better reached for research, this would open a vast and important research area. In addition, it would be of great importance to better understand how developing countries succeed in making the transition to a more developed stage.

16.4.1 Research on Students Preparing for Working Life

People start preparing for work life already as students. One major problem in research on careers is the different traditions in different branches of science. Before students enter the workforce they are mostly subjects of the developmental behavioral research area. However, after they make the transition to work life, they become subjects of another research area, namely occupational behavioral sciences. Because these areas have different research traditions, theories and measures; it has been difficult to obtain uniform information regarding careers in this transition.

As a solution to this problem, researchers could apply more some of the models of occupational health research already in school settings, and perhaps also vice versa; developmental concepts in occupational health research at least during early career (see Chap. 4). This would combine research on young students on the one hand, and on young workers who are already in employment on the other. This kind of cross-over research would better cover questions regarding, for example, the relationship between well-being at school and well-being at regular work, and the long-term effects of educational interventions on experiences in work life. For example, harassment or stress are some of the concepts which could be studied both in schools and workplaces using quite similar approaches and these phenomena may sometimes even continue over the transitions at the individual level.

16.4.2 Research on Preparedness, Employability and Job Retention

People need to make important choices and therefore need different competencies to become and remain sustainably employable, including preparedness for changes in the career environment. Coping with uncertainty creates tension because of uncertainty regarding the outcome. The uncertainty navigation model presented in Chap. 8 emphasizes the role of bracing and preparedness in effective strategies for uncertain employment situations. Whereas emotional bracing may be more typical in situations with few ways to control the outcome, people can prepare themselves in advance for uncertain, challenging situations. Chapters 4, 5, 10, and 13 demonstrate how people can be trained to be more prepared for various career transitions, which results in better careers and mental health. More research is needed to examine how employees can be empowered to learn the skills for controlling their careers in a more sustainable way in an insecure work environment. An important aspect affecting mental health is how employees can also be prepared for setbacks and barriers in the pursuit of more sustainable careers.

For people with few resources, barriers to employment may be so considerable that more systemic approaches are needed. One way to look at sustainable employability is the dynamic person-job fit (see Chap. 11). This kind of fit means a match between what a worker is able and willing to do on the one hand, and what the work demands and provides on the other. Accordingly, employability can become fragile

as a consequence of either skills obsolescence, motivation erosion, or both. This may especially apply to less educated workers, but also to other employee groups.

Job retention of older employees is a topical research area with a rapidly growing need for well-designed intervention studies and more information regarding how to ensure extended and sustainable work lives. Extended work lives are to a great extent related to the work environment and its attitudes regarding older workers, personal control and motivation to work longer, and we would urgently need more longitudinal and interventional research in this area. More research is also needed to clarify how older workers' sustainable careers in terms of job retention and health can be promoted by modifying work characteristics and working hours (see Chap. 14).

16.4.3 Need for Studies on Effective Interventions

Human behavior in an insecure and unpredictable employment environment has been studied a great deal, but studies examining the effects of interventions and policy measures in this area are still lacking. Developing and testing interventions to cope with job insecurity and career transitions should therefore be one of the core tasks of scientists in this field. The area of rehabilitation also still lacks well-designed effectiveness studies, and policy recommendations are more often made on the basis of beliefs than demonstrated effectiveness. The effectiveness and cost-effectiveness of the programs should be examined using more randomized controlled trials. Even though these more rigorous study designs require more resources and methodological competence than the less rigorous ones, they are significantly more affordable and effective in the long run. A great amount of confusion related to unclear and even contradicting study results can be avoided and fewer studies are needed to resolve the important study questions. Regarding the intervention programs themselves, it is not useful to test programs that lack a well-defined effectiveness theory. Without a theory regarding the causal effects of the intervention, there is nothing to learn through such effectiveness studies. More research is also needed about the barriers and facilitators of the successful implementation and dissemination of effective programs. As an example, Vinokur and Price demonstrate in Chap. 10 a case of the effective JOBS program, which has been disseminated in many parts of the world and has also been subject to implementation and dissemination research.

16.5 Main Conclusions

Although developments in the fields of policies, practice and research are often highly interconnected, there are typically considerable time laps between new research findings and the adoption of these ideas in policies and practice. In this book, which has taken the research perspective as its starting point, we have

presented ideas regarding more sustainable work lives in today's increasingly unpredictable career environments. We have also demonstrated how these ideas and research-based methods could be incorporated into policies and practices.

In responding to the recent advances of work life we face some major career and health challenges. These advances are likely to continue at an even faster pace at the same time as people live significantly longer lives than before. Current research has already started to clarify how these developments affect individual work life trajectories. One important conclusion of these efforts is that research with a life course perspective should become stronger in the future. This way we could find new ways to advance more sustainable work lives at the same time as pressures for longer work lives become stronger. People face many critical career transitions during their work lives and these are important episodes for enhancing both individual resources and career decisions. Even though employees have to increasingly manage their working careers themselves, critical support can be arranged in a systemic manner, for example in educational institutes or at workplaces.

There are also systematic ways to enhance employability of workers in precarious employment and to combat the erosion of their motivation to continue in working life. This also calls for more societal responsibility on the part of employers in the efforts to strive towards more sustainable working careers for their employees. It is essential to motivate work organizations to take more initiative in developing more jobs, which would also develop the skills of those employees at risk of deteriorating employability.

If more sustainable work lives also mean longer working careers, this could present a great opportunity for work organizations and society as a whole as regards more productive work lives. Developments in this area are of great societal importance and one should not be short-sighted and aim at only maximum quick profits; we should work towards more balanced and meaningful careers that provide maximum productivity in the longer run.

ERRATUM

Chapter 3 The Economy of Sustainable Careers During the Work Life Course: A Case from Finland

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Due to an unfortunate mistake in the production process figure 3.1 is repeated as figure 3.10

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