



**The impact of labor market exclusion
and job insecurity on health and
well-being among youth –
a literature review**

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- i. to advance the knowledge base that underpins the formulation and implementation of relevant policies in Europe with the aim of enhancing the employment of young people and improving the social situation of young people who face labour market insecurities, and
- ii. to engage with relevant communities, stakeholders and practitioners in the research with a view to supporting relevant policies in Europe. Contributions to a dialogue about these results can be made through the project website <http://www.except-project.eu/>, or by following us on twitter @except_eu.

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Abstract

This literature review discusses studies on the effects of labor market exclusion and job insecurity on health and well-being. Complementing previous reviews, we focus on youth, because previous research shows that young people increasingly experience labor market exclusion and job insecurity. In view of the fact that youth also suffered disproportionately from the economic crisis in 2008 and its aftermath, understanding the health and well-being consequences of early unemployment and career instability is of great importance. The transition from school-to-work represents a critical and sensitive period for youth. Experiences of labor market exclusion and job insecurity may set young people on trajectories that influence their health and well-being over the life course. To assess the potential short- and long-term negative effects, this review highlights the central findings of qualitative and quantitative empirical studies on the effects of labor market position on health and well-being. Bringing together the research on unemployment and job insecurity, we provide a comprehensive review that also emphasizes differences in the experience and consequences of early labor market exclusion and job insecurity across individuals, social groups, and countries. The systematic review shows that youth unemployment negatively affects mental health and well-being *and* to a lesser extent physical health. Moreover, recent research suggests that these negative effects may be persistent highlighting unemployment's potential to scar young people's health and well-being. Contrary to the dominant assumption, the literature does not allow concluding whether unemployment is more detrimental for youth or workers in their mid- or late career.

Besides unemployment, research also shows that insecure jobs and perceived job insecurity impair young adults' well-being. In contrast to the unemployment literature, these results are, however, often based on cross-sectional studies of the general population. More longitudinal research on young adults is needed to analyze how insecure jobs affect youth during their transition from school-to-work and their early career. This review also carved out three broader issues for future research. First, the majority of research that investigates under which circumstances labor market exclusion and job insecurity have negative effects is based on adult populations. However, it is likely that many moderating factors have different effects for younger and older workers (e.g., gender, unemployment protection). Second, quantitative and qualitative studies highlight that future research should pay more attention to differences in the experience of labor market exclusion and career instability. For instance, no studies exist that compare whether search unemployment after leaving school or university has similar effects as losing one's first job. Third, employment status should be conceptualized as a continuum such that the different experiences of unemployment and job insecurity can be compared in their effects on young adults' health and well-being.



1. Introduction

Previous studies have shown that young people increasingly experience labor market exclusion or job insecurity in terms of unemployment (Müller and Gangl 2003), periods of “not being in employment, education, or training” (NEET) (Eurofound 2012), and temporary employment (Baranowska and Gebel 2010). For instance, the youth unemployment rate in the EU27 increased from 15.7% in 2007 to 21.4% in 2011 and in almost all countries it was higher than the unemployment rate of adults. Similarly, the share of young people of age 15-24 (25-29) who are NEET has increased from 11% (17%) to 13% (20%) from 2008 to 2011 respectively (Eurofound, 2012). Accordingly, the negative effects of the economic crisis in 2008 seem to have been disproportionately experienced by youth (Bell and Blanchflower 2011, O’Higgins 2010, Scarpetta et al. 2010, Verick and Islam 2010). In this context, understanding the short- and long-term consequences of labor market exclusion and job insecurity for young people’s health and well-being is of great importance. Complementing previous reviews on the health and well-being consequences of unemployment and job insecurity (see McKee-Ryan et al. 2005, Paul and Moser 2009, Wanberg 2012 for recent reviews and meta-analyses on unemployment and Cheng and Chan 2008; De Witte 1999, 2005; Sverke et al. 2002 with respect to job insecurity), this review focuses on young people.¹ This focus is not only indicated by youth’ increasing exposure to labor market exclusion and job insecurity, but also by concerns that young people are particularly vulnerable. The transition from school-to-work and the early career can be understood as a critical and sensitive period setting the course with respect to individuals’ future labor market transitions *and* health and well-being.

The review addresses the following questions: Do unemployment and career instability at the start of the working life cause short- and/or long-term negative effects with respect to well-being and health? Are negative effects only transitory or do they persist? How exactly are these labor market positions experienced by youth in terms of well-being and health? We also focus on different types of coping with unemployment or insecure jobs. Which resources and coping strategies help or hinder youth to deal with their experiences? While previous reviews show a negative association between unemployment and job insecurity *and* health and well-being, systematic accounts on whether or not the effects differ for young people or across age groups are rare. To provide a comprehensive summary of the literature, we discuss qualitative and quantitative studies not only focusing on the overall effects, but also highlighting the differences in the experience and consequences of early labor market exclusion and job insecurity across individuals and countries. Moreover, combining two strands of literature (unemployment and job insecurity) allows for a comprehensive picture of the

¹ Youth is defined by age 15-29. However, this review also discusses studies of young people during their school-to-work transition or early career irrespective of age.



consequences of labor market exclusion and insecure jobs as well as highlights in which ways these two bodies of research complement each other.

Given that the focus of this review is on the effects of **labor market exclusion** and **job insecurity** on **health** and **well-being**, in the following, we define these concepts as they are used throughout this review. Figure 1 provides an overview about the key concepts and the relations that are of interest in this review. **Labor market exclusion** refers to the states of unemployment and not being in employment, education, or training (NEET) the latter including unemployment.² The NEET status focuses only on youth and aims at also taking into account those young persons who are disengaged with the labor market or lack access to education or training. It, thus, defines a broader group of youth at risk of social exclusion (Eurofound 2012). However, only focusing on labor market exclusion misses that many young workers are increasingly confronted with insecure employment at the beginning of their career. We, therefore, distinguish between objective and subjective **job insecurity**. Objective insecurity refers to jobs with contractual arrangements that carry along increased uncertainty such as temporary employment (i.e., fixed-term contracts, temporary agency work, seasonal or causal work).³ In contrast, subjective job insecurity refers to questions about fears of job loss (perceived job insecurity) or the likelihood of becoming unemployed.

With respect to the dependent concepts **health** and **well-being**, we focus on measures of objective and subjective health as well as subjective well-being.⁴ Well-being is defined according to the psychological literature on subjective well-being (Diener 1984, Diener et al. 1999). This concept includes a cognitive (i.e., global judgements of life satisfaction) and an affective component (i.e., positive and negative feelings), the later comprising both pleasant (e.g., joy, happiness) and unpleasant affect (e.g., guilt, sadness). Most quantitative studies on well-being use single-item measures of life satisfaction that mainly reflect the cognitive component of well-being. In contrast to quantitative research, qualitative studies do not define health and well-being a priori. In fact, it is often the goal of qualitative research to carve out the meanings of well-being to respondents facing labor market exclusion or job insecurity.

² This definition of NEET follows the use of International Organizations (e.g., ILO, OECD). Note that researchers have not yet agreed on a single definition of NEET (Eurofound 2012).

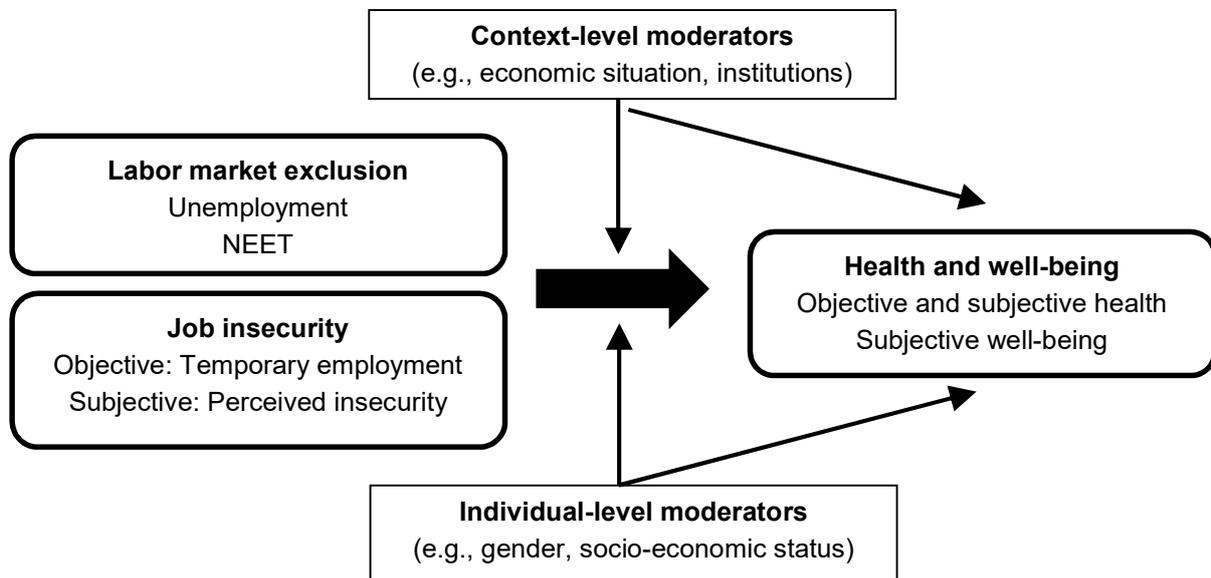
³ Other employment relationships that carry along insecurity may be informal employment (i.e., no contract), self-employment, and marginal part-time employment. However, because the literature search yielded only very few studies with respect to these employment statuses, we focus on temporary employment.

⁴ Given our focus on literature from the social sciences, we focus on subclinical measures of objective and subjective health. “Objective” measures also refer to self-reported measures on facts such as diagnosed illnesses (e.g., hypertension, use of certain drugs). In contrast, subjective measures ask respondents for an overall assessment of their life. Although not the focus, we also discuss some studies that focus on individuals’ health behavior.



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Figure 1 Overview about the key concepts and the relations of interest



Source: Own illustration

Based on these concepts, we conducted a comprehensive literature search utilizing the most important data bases in the social sciences (e.g., Web of Science, Sociological Abstracts, PubMed). We searched in titles, abstracts, and keywords for combinations of our key independent and dependent concepts with and without reference to youth (see Figure 1). The results were restricted to theoretical and empirical peer-reviewed journal articles and contributions to edited volumes and handbooks as well as select monographies that focus on the association between at least one independent and dependent concept. With the exception of a few seminal studies, we only focus on research published after 1990. Besides this we searched the references of the identified literature for any further relevant research. In addition, researchers from nine different European countries were asked to complement the list of references (see footnote 1).

Although the focus of this review is on youth and research that reports results stratified by age, we also included papers that examine the impact of labor market exclusion and job insecurity on health and well-being in the general or adult population. These studies will be consulted if they highlight important points relevant to the literature as a whole or if aspects are missing in studies on youth. The review's main objective is to discuss the central empirical findings and to illustrate these results by reference to recent and select research.⁵ Moreover, we identify relevant topics that so far have received less or

⁵ That is, we do not provide a summary of all articles that have been written on these topics. However, a bibliography with all the identified literature is available from the authors upon request.



no attention, in order to acquaint readers with the different strands of research and highlight potential avenues for future research.

The remainder of this review is structured as follows. In chapter two, we review and discuss research on the health and well-being consequences of labor market exclusion. After a brief summary of the theories linking unemployment *and* health and well-being, we discuss the central findings as well as the heterogeneity in the experience and effects of unemployment. Drawing on qualitative studies, we also emphasize differences in the perception of unemployment as well as highlight mechanisms and coping strategies. We, then, offer an interim conclusion about the discussed studies and identify open research questions. Chapter three discusses the literature on job insecurity, distinguishing between objective and subjective job insecurity. After a summary of some of the key theoretical arguments, we review the central findings and focus on how these differ across various subgroups. The review concludes with a summary of the main results and a discussion of how the two literature strands (i.e., labor market exclusion and job insecurity) may be more strongly linked in future research and highlights other directions for prospective studies.



2. Labor market exclusion

2.1 Theories about the effect of unemployment on health and well-being

In the following we provide an overview about the most important theories that have been used to explain the effect of unemployment on health and well-being (see Ervasti and Venetoklis 2010, Ezzy 1993, Giuntoli et al. 2015, Janlert and Hammarström 2009, Nordenmark and Strandh 1999, Rogge 2013 for more detailed discussions). Given our focus on youth, we will also briefly discuss arguments about why and how the effects of unemployment vary by age. We did not find any theories that explicitly discuss the link between NEET and health and well-being. However, the mechanisms will likely be similar to those discussed below.

The first insights into the experience and meaning of unemployment come from the seminal study “Die Arbeitslosen von Marienthal” by Jahoda, Larzarsfeld, and Zeisel (1975). Based on this study various stage models have been suggested to describe how the reaction to unemployment changes with the duration of unemployment (e.g., Eisenberg and Lazarsfeld 1938). For example, Jahoda et al. (1975) distinguish four stages: resignation, unbroken, despair, apathetic. While these models describe the experiences of the unemployed over time, they do not explain why and how unemployment affects health. Another criticism towards stage models is that they ignore the heterogeneity among the unemployed (Ezzy 1993).

The most commonly used explanation for the negative effects of unemployment on health is Jahoda’s (1981, 1982) functional model. According to this, employment is not only associated with manifest (i.e., income) but also latent benefits including a time structure, social contacts, collective purpose, personal status and identity, and being active. Unemployment deprives persons of these benefits such that they cannot satisfy their material and psychological needs. Jahoda also points out that functional equivalents do not completely meet the material and psychological needs and that “employment is psychologically supportive even when conditions are bad” (Jahoda 1981: 189). This and other aspects of the model have been criticized, for example, by Ezzy (1993: 45) stating that “Jahoda appears to romanticize employment and fails to appreciate that paid employment is, for some people, isolating and unpleasant.” Similar to the stage models, it is argued that the functional model fails to take account of the variation in the effects of unemployment and the agency of individuals (Rogge 2013: 55).

To address some of the problems of Jahoda’s functional model, Warr (1987) has proposed a vitamin model highlighting nine “vitamins” representing various environmental factors that are thought to positively influence mental health. These include the opportunity for control, the opportunity for skill use, externally generated



goals, variety, environmental clarity, availability of money, physical security, interpersonal contact, and a valued social position. Although Warr's model is also functionalist, it goes beyond adding additional latent benefits. It allows explaining variation in the effects of unemployment, because it breaks with Jahoda's dichotomy between employment and unemployment and does not assume that different jobs or different experiences of unemployment provide the same amount of vitamins. For example, a positive effect of unemployment on mental health can be explained by leaving a dissatisfying job that lacks important environmental factors. Accordingly, differences in mental health among the unemployed can be explained by environmental differences across groups and individuals. However, similar to Jahoda the vitamin model is criticized for ignoring individuals' interpretations of their environment and the different meaning they give to the same objective situations (Ezzy 1993: 46).

A model that explicitly highlights the importance of agency and represents a critique of Jahoda's functional model is Fryer's "agency theory" (Fryer 1986). In this theory people are seen as "active social agent[s] striving to make sense of [their] situation and acting according to reasons and intentions to pursue chosen goals ..." (Fryer and Payne 1984: 287). According to this model, the negative effects of unemployment on well-being and mental health can be explained by the financial restrictions unemployment imposes on individuals' ability to plan ahead and control their own life (Strandh 2000). Differences in the vulnerability to unemployment can be explained by different goals and restrictions of individuals. While Jahoda and Warr have been criticized for emphasizing the importance of environmental factors, Fryer has been criticized for ignoring the institutional constraints that restrict individuals as well as the latent benefits associated with employment.

In order to integrate the situation- and person-centered theories of Jahoda, Warr, and Fryer, Ezzy (1993) proposed a middle range theory of status passages that emphasizes individuals' subjective interpretations of their objective situations.⁶ Ezzy conceptualizes unemployment as a so-called divestment passage highlighting that unemployment is not a static experience but a process. For example, this process starts with a job loss, followed by a period of unemployment, and ends with re-employment. Ezzy (1993: 48) also emphasizes that these processes are located within "an individual's broader biography including concurrent and past involvements which influence the meaning of unemployment." According to this theory, the effects of unemployment on mental health and well-being depend on the interaction between the objective situation and the meaning individuals attach to this situation. For example, if work is central to an individual's identity, job loss and unemployment result in a "disruption of strategies ... to sustain consistent and positive self-images" (Ezzy 1993:

⁶ Ezzy regards his theory as middle-range as it is not only applicable to unemployment but also to other transitions like bereavement or divorce. Moreover, the theory also allows focusing on positive achievements so-called investment passages (e.g., marriage, parenthood).



50) which ultimately causes lower mental health and well-being. Differences in the effect of unemployment are explained by an analysis of the properties of status passages. That is, researchers should take account of whether or not an individual experienced job loss as desirable or unexpected or whether a young person became unemployed after finishing school compared to losing his or her first job.

Nordenmark and Strandh (1999) follow Ezzy (1993) in offering a synthesis of the functionalist perspective (Jahoda, Warr) and Fryer's agency theory. They highlight the varying importance of employment for satisfying the socially defined needs of different individuals. According to this view, the effects of unemployment on mental health and well-being vary with the dissonance between individuals' resources and needs. For example, persons who have an instrumental attitude towards work do not necessarily need a job (resource) to fulfill their socially defined needs. Moreover, persons may be able to adapt to unemployment and "re-interpret their identity by redefining their needs" (Nordenmark and Strandh 1999: 581). Drawing on earlier theories, Nordenmark and Strandh identify two rewards of employment: psychosocial and economic. In societies where employment is the norm and the main source of income, work is central to individuals' identities and participation in society. Differences between individuals can, then, be explained by reference to different psychosocial and/or economic needs.

The above discussion about the most important theories on the effects of unemployment on health and well-being highlights two issues. First, these theories usually focus on the link between unemployment *and* mental health and well-being. Instead few theories explain why and how unemployment negatively affects physical health. Empirical studies that examine the consequences of unemployment for physical health usually make use of one or more of the following arguments (see Bartley 1994, Korpi 2001 for more details): a) unemployment causes lower living standards and poverty *and* this may affect physical health, for example, through decreases in expenditures, b) according to stress theory (e.g., Pearlin et al. 1981) unemployment is a stressor that causes physiological reactions that in the long-run accumulate into physical illness, c) unemployment decreases health-promoting (e.g., exercising) and increases health-damaging behaviors (e.g., smoking). Second, the majority of theories assume that causality runs from unemployment to health (exposure, causation) instead of from health to unemployment (selection, drift). Although the number of empirical studies that attempt to distinguish between causation and selection appears endless and researchers seem to have agreed that there is an interplay between these processes, *theories* about health selection are comparatively rare (see West 1991 for a discussion). An explicit link between health (shocks) and subsequent labor market outcomes is discussed in the economic literature highlighting that health can be considered as a form of human capital (e.g., Cai et al. 2014). According to this view, health determines productivity which, in turn, affects workers labor supply decisions. Cai et al. (2014: 518) also highlight that poor health may shift preferences between income and leisure or that it changes "the time horizon over which labor supply



decisions are made.” Another mechanism highlighted in the literature is that poor childhood health reduces the amount of human capital acquired and this, for example, increases the risk of becoming unemployed (Haas 2006).

In concluding this section, we will briefly recount arguments about how the effect of unemployment on health may vary by age. Although it is sometimes suggested that the transition to adulthood represents a critical and sensitive period resulting in a higher susceptibility of youth to negative life events (e.g., Kieselbach 1988), most previous research argues that the negative effects of unemployment are strongest in mid-life (e.g., Broomhall and Winefield 1990, Rowley and Feather 1987). For example, it is often assumed that persons in their mid-life have more responsibilities and financial obligations (Jackson and Warr 1984, Reneflot and Evensen 2014) such that a job loss has more negative consequences. In addition, middle-aged persons may have a stronger employment commitment than younger workers who have just started or older workers who are close to the end of their career. Moreover, unemployment in the early career may to some extent be considered normal. McKee-Ryan et al. (2005) argue, however, that youth may be more negatively affected as they experience a greater pressure to establish a work identity. In addition, youth are often less protected from job loss, because they lack work experience and are not yet eligible for unemployment benefits (Reneflot et al. 2014). Finally, despite of the suggested smaller short-term effects, youth may be more likely to suffer from long-term effects as the reaction to early unemployment may be protracted and intensify over time (e.g., Eisenberg and Larzarsfeld 1938, Kieselbach 2000, Winefield 1997).

2.2 Quantitative studies

2.2.1 Central findings

This section discusses the central findings of studies examining the link between labor market exclusion *and* health and well-being in youth. Compared to the very large literature on the association between unemployment *and* health and well-being in the adult population (see Bartley et al. 2006, Dooley et al. 1996, Ezzy 1993, McKee-Ryan et al. 2005, Murphy and Athanasou 1999, Paul and Moser 2009, Roelfs et al. 2011, Rogge 2013, Wanberg 2012 for reviews and meta-analyses), there has been less research on youth unemployment and, in particular, on youth being NEET.

With respect to NEET the few available studies show a negative association with health and well-being (Baggio et al. 2015, Benjet et al. 2012, Veldman et al. 2015). For example, Baggio et al. (2015) compare NEET and non-NEET in their early twenties in Switzerland and find that NEET have greater risks for depression and substance use. However, based on longitudinal data, they suggest that this association is rather due to selection than causation. This is in line with the results of a Dutch study by Veldman et al. (2015) who find that stable trajectories of mental health problems between ages 11 to 19 are associated with higher risks of being NEET at age 19. Benjet et al. (2012)



study a very young sample in Mexico City (age 12-17) and find that NEET compared to adolescents who are in education report poorer mental health. However, when NEET are compared to adolescents who are working, they find few differences. In sum, there is little empirical evidence on the association between NEET *and* health and well-being and more research is required. Moreover, the few available studies highlight that it is important to take account of the heterogeneity of NEET (i.e., unemployed or inactive youth) and pay attention to the comparison group (i.e., youth that is employed or that studies) in future studies.

Compared to the few studies on NEET, much more attention has been paid to the link between youth unemployment *and* health and well-being (see Dooley 2003; Fryer 1997; Hammarström 1994; Kieselbach 1988, 2000, 2003; Reneflot and Evensen 2014; Winefield 1993, 1997 for discussions and reviews). In line with results for the adult population (see reviews above) three central findings stand out: First, despite of the different contexts, time periods, and study designs, research generally agrees that there is negative association between unemployment *and* mental health and well-being. Second, the evidence is somewhat less consistent with respect to the effects of unemployment on physical health and health-behavior. Third, longitudinal studies allowing to observe transitions into and out of unemployment and controlling for previous health and/or time-constant unobserved variables suggest that both causation and selection contribute to the negative association between unemployment and health.⁷ Despite these overall similarities across studies, substantial heterogeneity exists in the experience of unemployment and its effects (see below).

This section concludes with reviewing evidence about two questions raised above: First, how do the effects of unemployment vary with age? Second, do young people suffer from negative long-term effects of early unemployment?

The empirical evidence with respect to the first question is mixed. Based on some classic studies it is usually suggested that the relationship between age and the health effects of unemployment is curvilinear (Paul and Moser 2009). More specifically, it is assumed that younger and older people are less affected by unemployment than those in their mid-career. For example, the study by Rowley and Feather (1987) compares unemployed aged 15-24 and 30-49 and shows that psychological distress is greater among the latter. A similar comparison was conducted by Broomhall and Winefield (1990) showing lower mental health and life satisfaction in a group of middle-aged unemployed men (mean age: 48) compared to young unemployed men (mean age: 22). Contrary to that, Reine et al. (2004) find that the association between unemployment

⁷ Of course there are sophisticated longitudinal studies who find no association after controlling for selection and confounding (e.g., Böckerman and Ilmakunnas 2009, Browning et al., 2006). However, there are also well-designed studies that still find effects of unemployment on health and well-being (e.g., Burgard et al. 2007, Korpi 1997, Strully 2009). This illustrates that the debate cannot be decided by a single study as convincingly argued by Fryer (1997) and that research should rather focus on the interplay between causation and selection.



and poor psychological health is stronger for young people (age 21) than adults (age 30). Moreover, the classic studies are not in line with the results of several meta-analyses. For instance, the results of Murphy and Athanasou (1999) and Paul and Moser (2009) do not show a curvilinear relationship between studies' mean age and the effect of unemployment on health and well-being. The latter analysis even provides evidence for a u-shaped association meaning that middle-aged workers suffer less from unemployment than younger or older workers. The meta-analysis of McKee-Ryan et al. (2005) does also not suggest a clear age pattern and even finds that the effects are more negative in samples of school-leavers than in those of adult unemployed. Roelfs et al. (2011) show in their meta-analysis that unemployment is associated with increased mortality risks among those in their early (< 40 years) and mid-career (40-50 years), but not for older workers (50-65 years). A review by Norström et al. (2014) also highlights the inconclusive results with respect to the moderating role of age. In sum, these results illustrate that the empirical evidence on differences by age is far from clear and that more systematic studies are needed. In part, differences between the studies may be also due to different definitions of concepts like early career and different age groupings.

What about the second question? Do persons who experience unemployment in their youth suffer from long-term negative effects? Although recently there has been an increase in studies addressing the potential scar effects of youth unemployment (e.g., Brydsten et al. 2015, Daly and Delaney 2013, Mossakowski 2009, Schröder 2013, Strandh et al. 2014) the overall number of studies is low. An early study by Korpi (1997) examines the impact of previous unemployment experience and current unemployment on subjective well-being of Swedish youth. Using both lagged dependent variable models and fixed-effects regression, Korpi only finds effects of current unemployed suggesting that the negative effects are rather transitory. Another group of studies makes use of a sample of school leavers in Northern Sweden. For example, Hammarström and Janlert (2002) relate unemployment between the ages 16 to 21 with different health measures at age 30. Controlling for health at age 16 and other background factors, this study indicates that early unemployment contributes to adult health problems. The study by Strandh et al. (2014) uses the same data and measures mental health through an index of nervous symptoms, depressive symptoms, and sleeping problems. Distinguishing between unemployment in the age periods 18-21, 21-30 and 30-42 they find that early unemployment (18-21) is associated with poorer mental health at ages 21, 30, and 42 showing the potential for long-term negative effects. Interestingly, they also find that later unemployment does not have similarly lasting effects as youth unemployment. The latest study on these data comes from Brydsten et al. (2015) showing that early unemployment (16-21) is associated with more functional somatic symptoms at age 42 but only for men.

There are only a few studies on the potential long-term effects of unemployment that are not based on the Northern Swedish Cohort data. For instance, the study by



Schröder (2013) is based on the Survey of Health, Ageing, and Retirement in Europe (SHARE) covering persons of 50 years and older. Their retrospective data allow to link unemployment in the early- and mid-career with health outcomes in the late career. Controlling for childhood health and distinguishing the reasons for job loss, Schröder (2013) shows that individuals who have experienced plant closure report poorer health more than 25 years later. Daly and Delaney (2013) use British birth cohort data to relate unemployment experiences from young adulthood to middle-age with psychological health in midlife and find persistent negative effects. Similarly, Mossakowski (2009) examines the effects of current and past unemployment on depressive symptoms, using data from the National Longitudinal Survey of Youth in the US. Relating the cumulated years of unemployment between 1979 to 1993 with depressive symptoms in 1994 and controlling for background characteristics as well as early self-esteem and prior depressive symptoms, she finds a positive relationship. In sum, there is some evidence of scarring effects of youth unemployment on later health. This is in line with some earlier studies on the scarring effects of unemployment on life satisfaction in the general population (Clark et al. 2001, Knabe and Rätzel 2011). However, as most studies come from Sweden and often use the same data, more research is required. Specifically, the studies so far cannot distinguish between different health trajectories after early unemployment. For example, does early unemployment have negative effects on later health, because it has immediate negative consequences that persist over time or does a small negative effect accumulate and unfold over time, for instance, through initiating a negative spiral of unemployment and health problems?

In sum, research has shown that youth unemployment has both short-term negative effects on health and well-being as well as potential long-term consequences. However, it is very likely that the effects of early unemployment on health and well-being are dependent on other individual or contextual characteristics as well as on different experiences of unemployment. Evidence on these questions will be discussed in the next section.

2.2.2 Heterogeneity in the experience and effects of unemployment

Although the previous discussion shows that unemployment, on average, negatively affects health and well-being, researchers have also examined the **heterogeneity in the effects** by various **individual-** and **context-level moderators** (see McKee-Ryan et al. 2005 and Paul and Moser 2009 for a number of variables that are thought to moderate the relationship between unemployment and health). With respect to the individual-level variables we focus on gender and socio-economic status as two of the most often studied factors. For the context-level variables, we distinguish three lines of research. Besides studies on the heterogeneity in the effects, we also highlight research that examines the **heterogeneity in the experience of unemployment** (e.g.,



short- vs. long-term unemployment). Because there are very few studies that focus on youth, we also draw on research about the general population.

Individual-level factors

One factor that has been repeatedly examined is gender. Traditionally it is proposed that women suffer less from unemployment than man (e.g., Jahoda 1982) due to different roles and positions in the labor market and the family (Strandh et al. 2013, Van der Meer 2014). Accordingly, several studies find that the negative effect of unemployment on (mental) health and well-being is stronger for men (e.g., Artazcoz et al. 2004, , Van der Meer 2014, Winefield et al. 1991). This is also supported by the meta-analysis of Paul and Moser (2009) showing more negative effects in samples that are largely composed of males. Moreover, a review by Norström et al. (2014) suggests that the majority of studies on self-rated health find that men are more affected by unemployment than women, but at the same time highlights that there is substantial variation across countries. However, there also exist many studies that find no differences in the effects of unemployment on health and well-being by gender or even more negative effects for women (e.g., Berth et al. 2005, Hagquist and Starrin 1996, Hammarström and Janlert 1997, Hammarström et al. 2011a). These findings are in line with the meta-analysis of McKee-Ryan et al. (2005) that reports somewhat higher mental health and well-being among unemployed men than woman. How can these inconclusive results be explained?

Some recent studies have answered this question by pointing to the lack of attention that is given to context (Hammarström et al. 2011a, Reine et al. 2013, Strandh et al. 2013). For example, Hammarström et al. (2011a) attribute their finding of more negative health consequences for females compared to males to the Swedish context, emphasizing the high labor force participation rates of females. Reine et al. (2013) call for a stronger theoretical underpinning of research about the gendered consequences of unemployment. Their finding that women suffer more in terms of self-rated health and men have higher risks of increased alcohol consumption could be explained by the fact that “drinking is symbolically associated with masculinity among subordinate and marginalized men” (Reine et al. 2013: 7). A paper that explicitly takes account of context comes from Strandh et al. (2013) examining the gender differences in the effect of unemployment on health in a comparative study of Sweden and Ireland. Using panel data, the authors show that the effects of reemployment on mental health are similar for males and females in Sweden, but more positive for males than females in Ireland. This finding is explained by the different gender regimes in both countries. What conclusions can be drawn from the discussed results? If researchers examine how gender moderates the impact of unemployment on health and well-being, they should pay attention to the context (time and space) and give their analyses a clear theoretical underpinning. With respect to youth one should notice that gender roles may have substantially changed over time (Reneflot and Evensen 2014).



Another moderating factor that has received attention is individuals' socio-economic status, although again only few studies focus explicitly on youth (e.g., Melchior et al. 2015, Schaufeli 1997). Socio-economic status is usually either measured via educational attainment or via occupational status or class (McKee-Ryan et al. 2005, Paul and Moser 2009). The theoretical expectation is that persons with higher education or higher occupational status have more resources to buffer the negative effects of unemployment (Berchick et al. 2012, Pearlman 2015). However, one objection is that these persons have also more to lose or "farther to fall" (Berchick et al. 2012: 1893). Again the evidence is rather mixed, although the pattern seems to be clearer with respect to occupational status. For example, Norström et al. (2014) find in their review, that most studies report more negative effects for manual compared to non-manual workers (e.g., Artazcoz et al. 2004, Backhans and Hemmingsson 2012). This is also supported by the meta-analysis of Paul and Moser (2009) who suggest stronger effects in samples of blue-collar workers compared to white-collar workers. However, a very sophisticated study from Strully (2009) using panel data for the US is at odds with this perspective. Looking at so-called no-fault job losses (e.g., plant closures) to reduce the risks of selection bias she finds no differences between blue-collar and white-collar workers in the effects of job loss on health. Moreover, if one looks at job losses that may be related to health, the results show a stronger association between job loss and health among blue-collar workers. Strully (2009) interprets this as an indication of health-selection out of blue-collar jobs. A study by Andersen (2009) reports evidence that is inconsistent with both hypotheses. She finds that it is neither the lower nor the higher occupational classes that suffer most from unemployment, but rather the middle class.

With respect to education the results are less conclusive (McKee-Ryan et al. 2005, Norström et al. 2014). A study on Dutch youth compares the effects of unemployment on mental health in two groups: school-leavers (lower education) and college graduates (higher education) (Schaufeli 1997). Comparing school-leavers who are unemployed to those who continued education or entered employment, the study finds negative effects on mental health for the former. For the higher educated college graduates unemployment is not associated with negative mental health consequences. In line with that, a recent study by Melchior et al. (2015) finds that the effect of unemployment on substance use is stronger among lower educated than higher educated youth in France. Moreover, an Australian panel study by Green (2011) shows stronger negative effects of unemployment on well-being for lower educated compared to higher educated workers. Similarly, Berchick et al. (2012) find that education buffers the negative effect of involuntary job loss on depression in the US. A recent study by Pearlman (2015), however, finds stronger negative effects for more highly educated workers; however, this result seems not be robust across different models. Finally, the meta-analysis of McKee-Ryan et al. (2005) lends weak support to a more negative effect for the lower educated, but the authors conclude that more research is needed to reach conclusive results.



Context-level factors

While the discussion so-far illustrates that even for factors like age, gender, or socio-economic status no conclusive evidence exist, researchers have looked at many more individual-level variables (see previous reviews and meta-analyses). However, there has also been some research about context-level factors that moderate the relationship between unemployment and health which will be discussed in the following. With respect to context-level variables – concerning characteristics of regions or countries – three lines of research can be distinguished. First, studies that focus on the moderating role of the economic situation (e.g., GDP, income inequality, current unemployment rate, vacancy rate). Second, studies focusing on the welfare state regime, in general, or on specific characteristics like passive (unemployment protection) and active labor market policies. Third, studies that examine how culture affects the link between unemployment and health and well-being. Again, we here focus on evidence about the general population as studies on youth are scarce.

Studies that examine the moderating role of the economic situation usually focus on how the effect of unemployment on health and well-being varies across regions (e.g., municipalities, states, countries) or periods with lower and higher unemployment rates. Theoretically, two arguments are proposed. On the one hand, it can be assumed that the impact of unemployment is more negative in times of high unemployment, because the prospects of reemployment are poorer and the increased insecurity translates into lower health and well-being (Strandh et al. 2011, Turner 1995). On the other hand, higher unemployment may also be accompanied by a smaller negative effect of unemployment on health, because individuals can attribute their situation to external reasons and experience less self-blame (Turner 1995). In times of low unemployment job loss may rather be experienced as a personal failure. The latter arguments are also supported by theories from the happiness literature in economics (Clark 2003, Clark and Oswald 1994, Frey and Stutzer 2002) suggesting that high unemployment regions are associated with a weakened social work norm resulting in lower psychological costs of unemployment and less pressure to search for reemployment. The empirical evidence with respect to this question is rather mixed. The idea that unemployment hurts less when more people are unemployed has found support in several studies (Clark 2003, Clark and Oswald 1994, Clark et al. 2010, Frey and Stutzer 2002, Scanlan and Bundy 2009). However, other research often finds the opposite. For example, Turner (1995) finds for the US that the effect of unemployment on mental and physical health is stronger in regions with higher unemployment. This result is also echoed by Strandh et al. (2011), who report better health among the unemployed if the municipal vacancy rate is high and no alleviating effects of a higher unemployment rate. Pearlman (2015) uses variation in unemployment rates over time and also finds stronger negative effects of displacement on health if a person got displaced in a period of high unemployment. Using variation in unemployment rates across 95 countries, Calvo et al. (2015) find stronger differences between employed and



unemployed persons, the higher the unemployment rate. In line with this, a recent study from Greece finds that the negative impact of unemployment on health is stronger in times of the economic crisis (2010-2013) compared to a pre-crisis period (2008-2009) (Drydakis 2015). A very sophisticated analysis by Oesch and Lipps (2013) uses German and Swiss panel data and estimates fixed-effects regressions showing that in neither country the psychological costs of unemployment vary with the regional unemployment rate. A multilevel analysis by Eichhorn (2013) also does not find variation in the effect of unemployment by countries unemployment rate. Consulting the meta-analysis by Paul and Moser (2009), they report weak evidence that the negative effects of unemployment are stronger, the higher the unemployment rate. McKee-Ryan et al. (2005) find no statistically significant effects of the unemployment rate in moderating the relationship.

Another topic that has received some attention is how the effects of unemployment on health and well-being vary with the arrangement of the welfare state and, in particular, the unemployment protection and active labor market policies. For example, a study by Bambra and Eikemo (2009) finds a negative association between unemployment and health across 23 different European countries, but also highlights that the size of this association varies across different welfare state regimes. They report greater differences in Anglo-Saxon, Bismarckian, and Scandinavian regimes and smaller differences in the Southern and Eastern regimes. While this finding seems plausible for Anglo-Saxon countries, the overall result is not easily reconciled with the standard assumptions about the level of social protection across these regimes.

Studies that use a more direct approach to address how the effect of unemployment on health and well-being varies with unemployment protection rely on multilevel modeling to examine cross-level interactions. Eichhorn (2014) uses data from 28 countries from the European Values Study and analyzes how countries' expenditures on unemployment benefit payments per capita moderate the link between individual unemployment experiences and life satisfaction. He finds that the cross-country variation in the difference in life satisfaction between employed and unemployed persons cannot be explained by the level of unemployment benefits. This result is at contrast with a study by Wulfgramm (2014) who uses 21 countries from the European Social Survey and measures overall unemployment benefit generosity as being composed of net replacement rates and benefit duration as well as expenditure data. In addition, she also examines the moderating impact of active labor market policies. Wulfgramm finds substantial differences in the effect of unemployment on life satisfaction depending on countries benefit generosity and spending on unemployment. She also finds that active labor market policy reduces the negative effect of unemployment on life satisfaction, although this result is hard to disentangle from the effect of passive labor market policy. More generally, studies that examine the effect of unemployment insurance on health among the whole working age population suggest that it is important to look at the specific design of programs (coverage, benefit duration,



replacement rates). Specifically, these studies highlight the importance of coverage (e.g., Ferrarini et al. 2014).

A study by Nordenmark et al. (2006) examines the mental well-being of unemployed in Sweden, Ireland, and Great Britain. However, they do not directly compare the unemployed in the different countries with each other, but rather different groups within each country. They find that Swedish unemployed who receive income replacement benefits fare better than those who receive flat rate benefits or no benefits. In contrast, the results for Ireland and Great Britain are not in line with the idea that higher benefits buffer the negative effect of unemployment. Nevertheless, the authors go beyond these analyses by also asking whether social class differences are preserved depending on the design of unemployment benefits. In line with their arguments, they find that in Sweden, social class differences in mental well-being are preserved and attribute this to the income replacement benefits. In contrast, in Ireland and Great Britain flat rate benefits are suggested to explain the reversal of class differences in mental well-being, as the higher classes experience larger losses. A recent review by O' Campo et al. (2015) about the moderating role of unemployment insurance singles out two key findings. First, the better mental health and well-being of unemployed that receive unemployment insurance benefits may be explained by reduced financial stress. Second, receiving benefits does not fully reduce the negative health effects of unemployment. This is explained by the fact that unemployment not only has financial but also psychosocial consequences. The meta-analyses by Paul and Moser (2009) and McKee-Ryan et al. (2005) generally suggest that higher unemployment benefits are associated with smaller negative effects of unemployment on mental health.

Much less research exists on the moderating influence of culture. The meta-analysis by Paul and Moser (2009) finds that the negative consequences of unemployment are somewhat stronger in more individualistic compared to collectivistic countries. However, the differences are not statistically significant. A study by Martella and Maass (2000) examines differences in the effect of unemployment on health and well-being between the North and South of Italy. In the more individualistic North the authors find stronger negative effects of unemployment as compared to the collectivistic South. However, they cannot disentangle differences in the culture, for example, from differences in the labor market (e.g., unemployment rate). Another important cultural factor might be the importance that people attach to work. Comparing 11 European countries and using different measures of work ethic, Gallie and Russel (1998) do not find a relationship between countries average employment commitment and the impact of unemployment on well-being. However, in a study by Eichhorn (2013) that examines several context-level variables, unemployment has a more detrimental effect on life satisfaction in countries that place a greater emphasis on the importance of work.



Differences in the experience

While these overall results suggest that there is substantial heterogeneity in the effects of unemployment on health and well-being and that both individual- and context-level factors moderate the relationship, a further source of heterogeneity may lay in the experience of unemployment itself. In this section, we will shortly highlight research that addresses these differences and suggest that this represents a valueable avenue for future research.

One topic that has only received very limited attention is the comparison of unemployment after finishing school or higher education to unemployment due to job loss. Although theory (e.g., Ezzy 1993) and research in the general population (Young 2012) argue that the status before unemployment likely shapes the unemployment experience, no systematic evidence exist about how search unemployment and unemployment after job loss result in different psychological consequences for youth. An exception is the paper by Garcia Rodriguez (1997), who proposes a model that distinguishes explicitly between individuals who are unemployed and seeking for the first job (seekers), young unemployed who lost their first job (young losers), and adults who lose a job (adult losers). However, empirical research which tests this model or related ideas within a single study is missing, because usually studies assume the “seeker” perspective (e.g., Schaufeli 1997, Winefield 1993) or simply add the time (weeks, month, years) a young person has been unemployed within a specific period (e.g., Hammarström and Janlert 2002). A question related to the “seeker” perspective is in how far the results vary with the chosen comparisons group (e.g., those still at school, those who found a job, those who continue with higher education) and why groups differ in their health (e.g., does employment improve well-being or does unemployment reduce well-being, see Winefield 1993, 1997). Despite its importance (see Brand 2015), research on youth also often does not distinguish between job loss and unemployment or differentiate between the reasons for job loss (getting fired, quitting), although this information can provide rich context (see Burgard et al. 2007, Strully 2009 for studies on the general population).

However, there is some research that addresses two other important aspects of the heterogeneity in the unemployment experience. First, unemployment may have different effects depending on whether it is the first time a person becomes unemployed and how many periods of unemployment a person has experienced (Booker and Sacker 2012). Strandh et al. (2014) report two interesting results in this respect. First, they show that exposure to youth unemployment (age 18-21) was associated with later life mental health, while this was not the case for “intermittent” (age 21-30) or later unemployment (age 30-42). Moreover, they show that unemployment in two or three periods was associated with the worst mental health consequences. Second, there are some studies who examine how youth’ psychological response varies with the length of unemployment. In an early study Winefield and Tiggemann (1990) find support for a curvilinear relationship among a group of



teenagers meaning that psychological distress peaks after some month and declines thereafter. However, for young adults they do not find evidence for adaptation or a leveling off of the negative consequences of unemployment. This result is also reflected by different findings in the literature (no relationship between length and effect: e.g., Warr et al. 1982; increasing negative effects: e.g., Hammarström and Janlert 1997, Rowley and Feather 1987, Wadsworth et al. 1999; decreasing negative effects: e.g., Warr and Jackson, 1985). A recent study by Janlert et al. (2014) examines the association between cumulated (non-continuous) unemployment duration and different health outcomes. They find evidence for different processes (increased negative effects, adaptation) depending on respondents' sex and the health outcome studied. Processes of adaptation to unemployment have also been studied in the psychological and economic happiness literature (e.g., Clark 2006, Lucas et al. 2004). For example, the study by Lucas et al. (2004) shows that after a strong initial reaction to unemployment persons' life satisfaction shifts back towards a baseline level, however, adaptation is never complete. Thus, these studies are at odds with set-point theories (e.g., Headey and Wearing 1989) arguing that after an initial reaction to life events persons return to baseline levels of well-being that are due to personality factors. The meta-analyses by McKee-Ryan et al. (2005) suggest more negative effects with longer duration. Paul and Moser (2009), however, find that there is a peak at around 9 months followed by adaptation, although a negative effect remains. Of course these processes may be different across various groups and individuals. In sum, more research is needed to understand how the effects of unemployment duration differ among youth (and here among seekers and losers) and adults and whether, for example, continuous (no interruptions) or cumulated duration (allowing for intermediate reemployment) is studied.

2.3 Qualitative studies

The literature review revealed that health and well-being is often only one of many topics of interest in qualitative research on the experiences of unemployed persons. In addition, Rogge (2013) argues that the quantitative health and well-being approaches are closely tied to survey research and may not offer a good starting point for qualitative studies about the subjective interpretations and experiences of unemployed persons (Rogge 2013: 62). Against this background, we do not claim that we have found all qualitative studies that focus on differences among the unemployed or NEET with respect to health and well-being, but offer an insight into the current state of research.

Qualitative studies emphasize the heterogeneity in the experience of unemployment and the differences in the perception of health and well-being. For example, the starting point for qualitative studies are different social groups such as single mothers (e.g., Cook 2012) or homeless people (e.g., Haldenby et al. 2007, Mauron 1995) or structuring categories like gender and age (e.g., Björklund et al. 2015, Hagquist and



Starrin 1996, Hammarström et al. 2015, Yang 2002) or people who lost their jobs involuntary (e.g., Giuntoli et al. 2015). Given that a focus on the main results is too narrow, we will highlight three qualitative studies that cover different but related research questions. The first study points out that unemployment is a heterogeneous experience (Beelmann et al. 2001). The second study focuses on the mechanisms that lead to these different experiences (Rogge 2013), whereas the third highlights the different coping strategies the unemployed implement (Ball and Orford 2002).

Unemployment: a heterogeneous experience

In the context of a comparative research project including six European countries (Sweden, Belgium, Germany, Greece, Italy, and Spain), Beelmann et al. (2001) analyze 50 problem-centered and structured interviews with long-term unemployed youth in Germany. Based on a social exclusion perspective (Kronauer 1997), the authors build a typology distinguishing three groups of youth: those with a high risk, a heightened risk, and a low risk of social exclusion. The central findings concerning health and well-being are discussed in the following. One third of the sample is typified as being of *low risk of social exclusion* or socially integrated. Their social network is unaffected by unemployment and they think positive about their job chances and their future. Thus, this group shows no negative signs with respect to health and well-being. Most of them come from “intact families” and are living together with their partners. They have a training qualification and shorter unemployment durations compared to the other groups (Beelmann et al. 2001: 143-146). The interviewees who are categorized as having a *heightened risk of social exclusion* (mostly based on labor market, institutional, or cultural exclusion) show lower stress than the third group but also face problems like feeling ashamed, nervous, or bored. In addition, they see little chances for reintegration into the labor market. However, they feel more included in their social network which helps them to maintain their psychological health and well-being. Half of this group lives with their partners and they usually have lower to intermediate educational qualifications. Not all of them grew up with both parents. The persons with a *high risk of social exclusion* represent almost half of the sample. They are „suffering“ from a precarious financial situation and report no support from social networks or institutions (Beelmann et al. 2001: 141). This becomes also apparent in a variety of health-related problems such as psychosocial problems (depressive symptoms, sleeping disorders, and permanent stressors), a change in their health behavior (increasing alcohol and smoking consumption as coping strategies), and a lower self-esteem. Some youth from this group even speaks about suicidal thoughts (Beelmann et al. 2001: 141-145). Only 4 of 24 interviewees in this group live together with their partners, one third has a low or no school certificate and they are unemployed on average for 32 months (Beelmann et al. 2001: 135-145).



Mechanisms: how does unemployment affect health and well-being?

In a very sophisticated and detailed study, Rogge (2013) attempts to understand differences among the unemployed by addressing the following questions. Which factors shape the psychological health of the unemployed? How does the psychological burden change during unemployment? Rogge interviewed 25 (23) unemployed in two waves. His typology involves five types based on five dimensions of identity-processes of which one concerns psychological health. Although the study does not focus on youth, the findings will be summarized in detail as it offers interesting insights into the mechanisms through which unemployment affects health and well-being.

The first type the *self-adaptor* is characterized by recurrent short-term unemployment instead of continued long-term unemployment. The interviewees are relatively unimpressed by unemployment as it has become a normal part of their life that occurs every now and then. The financial support they receive by the state is seen as an acquired right and provides psychological relief. The everyday life during a phase of unemployment is shaped by active compensation and the formula “less money, more time”. Persons in this modus are familiar with unemployment. They have experienced unemployment within their own biography as well as through their social network. According to Rogge, when people are familiar with unemployment in this way, negative psychological effects are evened out. This immunization is also founded in the episodic character of their unemployment experiences. The self-adaptors are sure that they can quit unemployment by their own efforts. More than half of the interviewees were in employment at the second interview and reported a steady well-being even when employed, which Rogge summarizes with the formula “more money, less time” (Rogge 2013: 115-130).

The second type is called *liberation of the self*. The interviewees in this type were unhappy in their last and continuous job and it is the first time for them that they resigned. Thus, they have “chosen” to be unemployed and see this phase as a timeout from work, which was experienced as troubling and an alienation of their self. As unemployment is seen as a “vacation” in which they want to get control over their life again, their psychological health improves upon entering unemployment. For this type, health is very often the center of unemployment. They change their way of eating and their sporting activity and take care of their quality of life – unemployment is a promise of health-improvement. It is also important for them to present unemployment as controllable. They refer to their above-average job qualification and their intensification of social relations (e.g., being a “present mother”). Rogge points out that the “liberators” are a socially privileged group since they can afford quitting their job. Furthermore, they are singles or couples without children. The “liberators” do not want to stay unemployed which might cause them psychological problems, but Rogge finds no signs for these in his interviews (Rogge 2013: 137-160).



The third modus is called the *fight for the self* and refers to experiencing unemployment as a drama or a shock with an uncertain end. The feeling of a constant threat and insecurity is dominating the life of the interviewees in this modus. Moreover, their psychological health is massively impaired. They feel incongruent and worthless and their well-being is below the average of the sample. The interviewees are afraid of their future and their existence and fear and panic is present in their thoughts. They also report sleeping-problems. Characteristic is a deep questioning about their selves – unemployment is experienced as a crisis of the self with lots of negative emotions like feeling ashamed, down, worthless, and thinking about suicide. They are exhausted, because they have to fight to find their self and they only wish to recover. In this modus people wish to regulate their feelings, for example, by using strategies of self-motivation which are, however, exhausting too. This modus is heterogeneous. It is composed of persons who experience unemployment as a shock and most of them are short-term unemployed. However, it also often includes groups that face serious financial problems like single parents (Rogge 2013: 162-198).

The modus of *deterioration* is the fourth type. Interviewees in this modus see unemployment as a fateful disaster. Every hope to find reemployment is gone – they became an „unemployed“. They see themselves as „losers“ and abandon all hope to find their self ever again. Their well-being is clearly below average and they believe that they cannot fall any deeper. The specific syndrome of this modus is depression. Their every-day life is dominated by loss of interest and joy and apathy. They see their life as a failure and conform to the stigma of unemployment. It is their failure and they are inferior. Being ashamed and hopeless is typical. This modus is dominated by people who were in continuous jobs followed by a social fall. They sometimes use informal or occasional jobs to improve their income. The interviewees rather belong to a lower social class, have less certificates, and low financial resources (Rogge 2013: 201-220).

Being unemployed can also become a part of “good life” as indicated by the fifth modus, the *transformation of the self*. These interviewees had a strong work-orientation before becoming unemployed and now change their selves. For this transformation time is required and so this modus is following a sequence of other modi. According to Rogge, it is a long way of saying good-bye to the old self. Mostly this group is composed of long-term and continuous unemployed that, however, report no clinical relevant symptoms. They rather talk about positive feelings and feeling comfortable with the situation. They also interpret their selves and their circumstances anew. It is a new story of the self (Rogge 2013: 224-235).

These two studies underline that unemployment does not automatically lead to a bad perception of health and well-being and even can have positive effects. In particular, Rogge shows that constructions of identity should be seen as modus and that unemployed persons can pass from one to another modus such that they are not a static characteristic of a person.



Coping: How do the unemployed handle their experiences?

Another topic of interest concerns activities which help or hinder to improve the well-being of unemployed people. Based on a grounded theory approach Ball and Orford (2002) develop a model of meaningful activities in the context of unemployment. They interviewed 24 long-term unemployed under the age of 35 with a semi-structured interview and categorized activities as: domestic, educational, work-like, socializing, and none. For activity to be personally meaningful it is important that it represents a challenge, requires sustained effort and commitment, and is valued by others. Ball and Orford show that meaningful activities help unemployed persons to cope with their experiences. The personally meaningful activities create the opportunity to gain self-determination and self-development. Moreover, these persons feel confident and competent. Social comparison, self-appraisal, and religious and political beliefs as well as social support are highlighted as consolidating factors.

2.4 Interim conclusions

What conclusions can be drawn so far? This review highlights that although the consequences of youth unemployment for health and well-being are well studied, almost no research has focused on youth that is disengaged from the labor market and lacks access to training or education. More studies should examine whether the results from unemployment research also apply to youth who are NEET. Specifically, future research should focus on those NEET, who are not registered unemployed and address whether their stronger detachment from the labor market carries along even greater risk for health and well-being. With respect to youth unemployment the review shows that it negatively affects mental health and well-being *and* to a lesser extent physical health. The review also suggests that the negative associations cannot be explained by health selection alone. Moreover, some studies show that the consequences are not only transitory but may persist up to several years. Longer unemployment durations are usually accompanied by more severe effects on health and well-being, although research also points to processes of adaptation.

Despite of a large number of studies, the results about effect heterogeneity are mixed and much more ambiguous than typically assumed. For example, current research does not allow concluding that unemployment has more negative effects for workers in middle-age compared to youth or older persons. Similarly, statements that men are more negatively affected by job loss than women lack context and studies that focus on youth are very rare. Some quantitative but in particular qualitative studies highlight that differences in findings may only be understood by taking account of the circumstances that accompany unemployment. In addition, the few qualitative studies emphasize that it is often the combination of a number of factors that shape the experience of unemployment and the respective perceptions of health and well-being. In contrast, quantitative studies often only focus on one moderating factor at a time. Thus, future qualitative and quantitative research should carve out under which circumstances



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unemployment is expected to have negative or positive effects on health and well-being. Lastly, research on youth unemployment should pay more attention to the different experiences of unemployment itself. Almost no studies distinguish between job loss in the early career and searching for the first job after leaving school or university, although such research may facilitate the development of targeted interventions to combat youth unemployment and prevent long-term negative effects.



3. Job insecurity

3.1 Theories about job insecurity and health and well-being

The mechanisms about why and how job insecurity affects health and well-being are for the most part borrowed from research on unemployment and work stress (e.g., De Cuyper et al. 2008; De Witte 1999, 2005; Strandh 2000; Sverke et al. 2002). We, therefore, briefly explain how the theories that have been discussed in section 2.1 are adapted and highlight some additional arguments that are unique to studies on the health and well-being consequences of job insecurity. As for unemployment, most theories put more emphasis on mental health and well-being compared to physical health. Moreover, the majority of theories assume that causality runs from job insecurity to health and well-being. In the following, we do not distinguish between theories referring to perceived job insecurity (i.e., the anticipation and threat of job loss and unemployment) and objective job insecurity (i.e., temporary employment).⁸ However, the results of these two lines of research will be discussed separately below.

The functionalist theories of Jahoda (1982) and Warr (1987) are often used to explain why and how job insecurity negatively affects health and well-being. The models are adapted by resolving the dichotomy between employment and unemployment and highlighting that secure and insecure employment may be associated with different amounts of manifest and latent benefits (Jahoda 1982), vitamins (Warr 1987) or rewards of employment (Nordenmark and Strandh 1999). For temporary employment, this argument is often reinforced by differentiating between a core and periphery workforce (De Cuyper et al. 2008, Virtanen et al. 2005) and assuming that temporary jobs offer “lower wages, less prestige and power, limited autonomy, less pleasant working conditions, fewer career prospects, and higher job insecurity” (Gebel and Voßemer 2014: 129). Another mechanism borrowed from research on unemployment (Fryer 1986) refers to the financial insecurity and how this restricts individuals’ ability to plan ahead and control their lives. Assuming that temporary jobs offer less security and do not resolve the uncertainty of unemployment to the same extent as permanent jobs (Strandh 2000), differences in health and well-being are expected. “Predictability” and “controllability” are also two frequently highlighted factors in the literature on perceived job insecurity (De Witte 1999: 159). In fact, this line of research sometimes even assumes that concerns regarding the future continuity of one’s job are associated with more uncertainty than job loss or unemployment themselves due to the ongoing ambiguity about whether one will be employed or not in the near future (e.g., Sverke et al. 2002). This is in line with early stress research emphasizing that the anticipation of a stressor is an equally important source of poor health and well-being as the stressor

⁸ Objective job insecurity might not only be defined in reference to certain contractual situations, but also be investigated when employers experience downsizing or restructuring (see Ferrie 2001 for different ways to study job insecurity). This latter kind of research will not be reviewed here.



itself (Lazarus and Folkman 1984). As for unemployment, the stress process model (Pearlin, 1981) has been used to explain how job insecurity as a chronic stressor causes a stress response that ultimately results in lower health and well-being (Glavin 2015).

However, there have also been some arguments that are more unique to research on job insecurity. De Cuyper et al. (2008), for instance, highlight social comparison and social exchange theories arguing that differences between, for example, securely and insecurely employed workers in health and well-being may be related to perceptions of fairness. Similar mechanisms are represented in models from work stress research where temporary workers may perceive an imbalance between their efforts and rewards (Siegrist and Marmot 2004). From a social exchange perspective, psychological contract theories about the perceived obligations of employers and employees predict that job insecurity may represent a breach resulting in negative consequences for employees' well-being (De Witte 2005). However, given that the psychological contract of temporary workers is likely narrower than that of permanent workers, it is sometimes expected that only the latter are negatively affected by job insecurity (e.g., De Cuyper and De Witte 2007, Virtanen et al. 2011).

Given our focus on youth, we will now briefly recount arguments about how the effect of job insecurity on health and well-being may vary by age. Despite some additional arguments, the literature on job insecurity usually extrapolates the arguments on the moderating role of age from research on unemployment (e.g., Cheng and Chan 2008, De Witte 1999, Glavin 2015). Therefore, job insecurity is assumed to be more detrimental to health and well-being for workers in their mid-career than for younger and older workers, because the former have more responsibilities and financial obligations. For younger workers it may be easier to find reemployment, whereas older workers may have access to alternative roles like retirement (De Witte 1999). However, sometimes it is only distinguished between younger and older workers, where the latter refers to both mid- and late career. For example, Cheng and Chan (2008) assume that older workers react more strongly to job insecurity, because they perceive a lower level of occupational mobility and are, therefore, more dependent on their current jobs. Glavin (2015) distinguishes workers in middle age and late-working life and argues that the latter have more to lose if they become unemployed (i.e., research shows stronger long-term negative effects in terms of employment and earnings). Given their continuous careers job insecurity may in addition represent a stronger violation of the psychological contract between employers and employees. In contrast, younger workers may perceive job insecurity as “normal” and an “acceptable feature of working life” (Glavin 2015: 305). Interestingly, these arguments mainly come from research on subjective job insecurity, while studies on temporary employment have not paid special attention to youth. This is surprising given that temporary employment is nowadays often a feature of labor market entry and school-to-work transition.



3.2 Quantitative studies

3.2.1 Objective job insecurity: Central findings

Compared to the large literature on the health and well-being consequences of unemployment (see section 2.2), there have been considerably less studies on the potentially negative effects of temporary work including fixed-term contracts, temporary agency work, casual, and seasonal employment (see De Cuyper et al. 2008, Kim et al. 2012, Virtanen et al. 2005 for reviews and meta-analyses). In particular, only very few studies focus on youth (e.g., Bjarnason and Sigurardottir 2003, Reine et al. 2008) and the moderating role of age has not been systematically investigated (see LaMontagne et al. 2014 for an exception; this is somewhat different for perceived job insecurity: see below).⁹ Therefore, in the following, we will mainly refer to results about the general population.

The central findings can be summarized as follows: First, most studies compare temporary to permanent employment and report a negative association with health and well-being. However, compared to the literature on unemployment the results indicate a large amount of heterogeneity across studies (De Cuyper et al. 2008, Virtanen et al. 2005). For example, in their meta-analysis Virtanen et al. (2005) find that temporary workers report higher psychological distress, but the results are inconclusive with respect to other health outcomes. This is in line with the summaries by De Cuyper et al. (2008) and Kim et al. (2012). The latter, however, suggest that this heterogeneity may be explained by differences across welfare regimes. They report that precarious employment is consistently associated with negative health outcomes in all welfare regimes except for the Scandinavian countries. They attribute this finding to the egalitarian welfare employment policies in the latter.

Second, there have been fewer longitudinal studies that examine transitions between unemployment, temporary employment, and permanent employment and allow making statements about the issues of causation and selection (e.g., Dawson et al. 2015). Moreover, the longitudinal studies often provide an additional comparison allowing addressing the question if temporary employment is closer to unemployment or permanent employment in terms of its health and well-being consequences (Gebel and Voßemer 2014, Grün et al. 2010). Most of these studies find that temporary employment compares favorably to unemployment, but studies differ in their assessment when it comes to the comparison with permanent employment (few differences to permanent employment: e.g., Bardasi and Francesconi 2004, Gebel and Voßemer 2014, Grün et al. 2010, LaMontagne et al. 2014; relevant differences to

⁹ There has been some research by Dooley, Prause, and colleagues that explicitly focuses on youth. They argue for a continuous conceptualization of employment instead of a dichotomy between employment and unemployment (see Dooley 2003 for a review). However, their studies mostly focus on involuntary part-time or low wage employment as forms of inadequate employment.



permanent employment: e.g., Gash et al. 2007, Kim et al. 2008, Rodriguez 2002, Strandh 2000, Waenerlund et al. 2011).

Third, in contrast to the growing literature on the long-term effects of unemployment, almost no studies have examined, whether the potentially negative effects of temporary employment increase or decrease over time. For example, Gash et al. (2007) argue that a positive effect of reemployment in a temporary job may decrease over time, as workers realize that they hold insecure employment. Investigating German and Spanish panel data they show that temporary reemployment has positive effects for both German and Spanish men; however, while the positive effect persists two years after reemployment for German men, it is only temporary in Spain. In contrast, Quesnel-Vallee et al. (2010) examine the effect of temporary employment on depressive symptoms in the US. While they find an increase in depressive symptoms in the short-run, the results suggest that four years after exposure temporary employment does not have any lasting negative effects.

Unfortunately, only few studies have focused on youth or compared the effects of temporary employment across different age groups. Although not the focus of their study, Bjarnason and Sigurardottir (2003) find in their comparative study of 18-24 years old youth in five Scandinavian countries and Scotland that those who find temporary employment experience less psychological distress than those who are continuously unemployed. However, the positive reemployment effect is smaller for temporary compared to permanent reemployment. Reine et al. (2008) focus in their study on 25-29 year old young adults who transition from an unstable labor market position (including unemployment, occasional jobs and labor market programs) to permanent employment. They show that taking up permanent employment is associated with positive effects in terms of mental health. Using Australian panel data LaMontagne et al. (2014) do not find that age moderates the effects of temporary employment on mental health in any systematic way.

3.2.2 Objective job insecurity: Heterogeneity

Given these overall results, what is known about individual- and context-level moderators (**effect heterogeneity**) of the relationship between temporary employment and health and well-being? As for unemployment, we focus our discussion on gender and socio-economic status as moderating variables at the individual-level. In addition, we discuss how the heterogeneity in temporary employment itself shapes workers health and well-being.

Individual-level factors

The majority of studies on the health and well-being effects of temporary work do not analyze men and women separately. Even when they do they mostly do not propose hypotheses about why and how the effects of temporary employment should differ by gender. Nevertheless, some systematic evidence is offered in the meta-analysis by



Virtanen et al. (2005) showing that the association between temporary employment and health is not moderated by the share of females in a study. Although there are arguments that women's health may be more affected by precarious employment (see Menendez et al. 2007 for discussion), most studies find similar results for males and females. This is also consistent with recent studies that find little substantial differences by gender (e.g., Kim et al. 2008, LaMontagne et al. 2014). An exception is the study by Gash et al. (2007) who find different effects of permanent and temporary reemployment for German and Spanish men and women. While for German and Spanish men both permanent and fixed-term contracts are associated with positive effects on health as compared to the continuously unemployed, for women the results are more complex. For German women only permanent reemployment has a positive effect on health, while for Spanish women permanent reemployment has no effect and reemployment in fixed-term contracts has even negative effects. The authors argue that these results may be explained by the double-burden of paid- and unpaid work many women face. The authors also state that they tested for differences by education and occupational status, however, these analyses were not found to be significant.

A study that explicitly tests whether the effects of temporary employment differ for low and high educated workers comes from Hammarström et al. (2011b). The authors start from the core-periphery perspective and argue that temporary employment for the higher educated is less likely to be located in the periphery than temporary employment for the lower educated. Analyzing data from a cohort of Swedish school-leavers, they find that temporary employment has more negative effects on self-rated health for the low educated. However, with respect to psychological distress and depressive symptoms they find the opposite or no differences.

Context-level factors

Even less studies exist on context-level moderators. In their meta-analysis, Virtanen et al. (2005) find that the negative relationship between temporary employment and health is stronger the lower the proportion of temporary workers and the lower the unemployment rate in a country. They ascribe this to differential health selection as well as differential composition. For example, in countries with a low number of temporary workers these may be composed of a more homogenous group of low educated or manual workers. In their review, Kim et al. (2012) also highlight the large amount of heterogeneity across studies. Taking a welfare regime perspective, they classify studies according to six regimes. While temporary workers in Scandinavian countries report equal or better health than permanent workers, the association is found to be negative in most studies in the remaining regimes. The authors argue that this may be due to the comprehensive employment policies in Scandinavian welfare states. However, there may of course be other factors that explain these differences, for example, differential composition.



A study that takes a more direct approach in addressing the moderating role of macro variables is Scherer (2009). Examining 16 western European countries from the European Social Survey 2004, she finds that the negative association between temporary employment and life satisfaction is moderated by the employment protection legislation (EPL), the unemployment rate, and a welfare state intervention (WSI) index. In line with expectations, the study shows that the stricter the EPL, the more negative is the effect of temporary employment on life satisfaction. With respect to the unemployment rate the finding is somewhat surprising. In countries with higher unemployment rates the study reports no differences between temporary and permanent workers. According to Scherer, this may be explained by the fact, that workers are happy to have any job at all in a situation where there is a threat of unemployment. Lastly, the negative association between temporary work and life satisfaction decreases, the higher the WSI. This suggests that welfare states may be important in shaping the health and well-being consequences of insecure employment.

Differences in the experience

A topic that has received considerably more attention is the heterogeneity in temporary employment itself. While studies often use a undifferentiated measure of temporary work (e.g., due to data restrictions), that is, collapsing fixed-term contracts, temporary agency work, seasonal, and casual work within a single category, the literature acknowledges that these work arrangements differ and are best analyzed separately (De Cuyper et al. 2008, Virtanen et al. 2005). For example, De Cuyper et al. (2008) review differences between types of temporary arrangements as one explanation for the heterogeneity of findings across studies. Often fixed-term contracts are assumed to be more similar to permanent contracts, while temporary agency work and casual and seasonal work are more likely to reflect the idea of a workforce periphery. The former are also often referred to as screening contracts that may function as a stepping stone into permanent employment and may, thus, not be associated with any (long-term) negative effects. Classifying different work arrangements into three groups of employment instability (e.g., fixed-term contracts = low instability, casual or seasonal work = high instability), Virtanen et al. (2005) find in their meta-analysis more negative effects of temporary work if instability is considered high. Moreover, Gundert and Hohendanner (2014) examine how the transition from unemployment into permanent work, fixed-term contracts, and temporary agency work affects social-well-being in Germany. They find that reemployment has positive effects and that the differences between finding permanent work or fixed-term jobs are small. However, unemployed who take up temporary agency work experience a much less pronounced improvement in social well-being. Despite this, reemployment in temporary agency work is still associated with positive effects compared to those who are continuously unemployed.

This result points to another source of heterogeneity that has received less attention so far. To whom should temporary workers be compared? The majority of research compares temporary work to permanent employment (e.g., the meta-analysis of



Virtanen et al. 2005 is restricted to studies with this comparison). Recent longitudinal research, however, allows highlighting the integrative potential of temporary jobs compared to unemployment (e.g., Gebel and Voßemer 2014, Grün et al. 2010), although more evidence is needed on the long-term effects of these comparisons. Such studies would be particularly interesting in the context of youth transitioning from school to work. Given that many young workers face insecure employment in their first job, the question about the health consequences compared to both secure employment and unemployment has yet to be answered.

3.2.3 Subjective job insecurity: Central findings

Another way to address insecure employment is to examine the relationship between perceived job insecurity, that is, “the concern regarding the future continuity of the current job” (De Witte 2005: 1) *and* health and well-being. This literature emerged from debates about how globalization has caused changes in the world of work (i.e., deregulation, downsizing, restructuring) that translated into greater insecurity among the workforce. Given this tradition only few studies have focused on youth (e.g., Berth et al. 2003, Berth et al. 2005, West and Sweeting 1996). However, there has been some research on how the effects of subjective job insecurity vary across different age groups (e.g., Cheng and Chan 2008, Glavin 2015). What are the central findings from this literature?

First, similar to research on unemployment studies consistently find a negative association between perceived job insecurity *and* mental health and well-being as well as physical health (see Burchell 1994; Cheng and Chan 2008; De Witte 1999, 2005; Sverke et al. 2002 for reviews and meta-analyses). Second, the meta-analyses by Sverke et al. (2002) and Cheng and Chan (2008) suggest that the magnitude of the relationship is small to medium and greater for mental health and well-being compared to physical health. Third, although early longitudinal research that is able to control for prior outcomes as well as various confounding factors finds negative effects of job insecurity (e.g., Burchell 1994; De Witte 1999, 2005), researchers call for more longitudinal studies to approve these findings. Two recent papers by Burgard et al. (2009) and Glavin (2015) use various US panel data and report evidence that perceived job insecurity has a causal effect on health. Burgard et al. (2009) not only control for prior health, but are also able to take account of factors that were often unobserved in earlier research like negative reporting style (e.g., neuroticism). As part of his analysis, Glavin (2015) finds negative effects of job insecurity on psychological distress and self-rated health using fixed-effects regression models to control for time-constant unobserved heterogeneity.

What do we know about the effects of perceived job insecurity on youth and how do the effects differ by age? Unfortunately, only few studies examine the association between subjective job insecurity and health in youth. Berth and colleagues find in their studies on young adults in East Germany that perceived job insecurity is negatively associated



with health (Berth et al. 2003, 2005). However, these studies miss important controls and do not make use of the underlying panel data. West and Sweeting (1996) find for Scottish youth that expectations of unemployment result in poorer mental health while controlling for prior health. In their study on young adults in France Dalglish et al. (2015) find that perceived job insecurity is associated with higher suicidal ideation. More studies have paid attention to the moderating role of age. While some studies find little evidence of age moderating the relationship between job insecurity *and* health and well-being (De Witte 1999, Laszlo et al. 2010, McDonough 2000) a recent longitudinal study by Glavin (2015) reports results that are in line with the arguments presented in section 3.1. Glavin finds that younger workers (18-34) report fewer health problems than workers in their mid-career (35-44, 45-54) or older workers (55-65). Moreover, while middle-aged workers report similar levels of psychological distress and self-rated health as older workers, persistent job insecurity results in more feelings of anger for the former. Thus, while there is evidence that young workers suffer the least, it is not clear whether the negative effects peak in middle-age or continue into the late career. These results are consistent with a meta-analysis by Cheng and Chan (2008) who report a stronger negative association between job insecurity *and* psychological and physical health in studies with older (mean age: ≥ 40) compared to younger samples (mean age ≤ 40).

3.2.4 Subjective job insecurity: Heterogeneity

As for unemployment and temporary employment, we focus on effect heterogeneity with respect to gender and socio-economic status for the individual-level variables. As before, we also discuss differences by macro-level factors as well as differences in the experience of job insecurity.

Individual-level factors

Based on the argument that unemployment is worse for men than women, because the latter have access to alternative roles, some studies find that job insecurity only affects men (De Witte 1999) or that women are less affected than men (Cheng et al. 2005). However there are also studies that show no substantial differences by gender (Laszlo et al. 2010, McDonough 2000). This is in line with the results of the meta-analysis by Cheng and Chan (2008) who do not find differences in the relationship between job insecurity and mental and physical health when comparing male- or female-only samples. Laszlo et al. (2010) find few differences across a number of various European countries with the exception of Spain. In Spain, men seem to be more affected by job insecurity than women. The authors suggest that future research should take account of the context, because this may explain differences in the moderating role of gender across studies. This is also consistent with the study by Strandh et al. (2013) who argue, that research must consider the gender regime in examining how the impact of unemployment on health differs for males and females.



With respect to the moderating role of socio-economic status the empirical evidence suggest rather little differences by education or occupational status. The meta-analysis by Sverke et al. (2002) finds no systematic differences in the effect of job insecurity on mental health for manual and non-manual workers. This is in line with the results of Cheng et al. (2005), De Witte (1999), Laszlo et al. (2010), and McDonough (2000) who find no systematic patterns in the effects of job insecurity by education and/or occupational status. An exception is the recent study by Dalglisch et al. (2015) showing that job insecurity is associated with higher suicidal ideation and that this relationship is particularly strong among the low educated.

Context-level factors

To what extent do the effects of job insecurity on health and well-being vary across different countries and can these differences be explained by macro-level factors? The few studies addressing these questions come to different conclusions. The study by Laszlo et al. (2010) finds surprisingly little differences in the effect of job insecurity on self-rated health across 16 European countries. In all countries except for Sweden and Belgium, job insecurity is moderately associated with poorer self-rated health and there is little variation in the magnitude of these effects. Therefore, the authors suggest that even generous welfare states are unlikely to buffer the negative consequences of perceived job insecurity. This result is at contrast with the review by Kim et al. (2012) who report that the association between job insecurity and health varies across studies conducted in different welfare regimes. In particular the authors report, that research from Scandinavian countries relatively often finds no negative associations, while studies from the remaining welfare states predominantly find a negative effect of subjective job insecurity on health. The paper from Carr and Chung (2014) supports this later view. Examining 22 countries from the European Social Survey, the authors find that the negative association between employment insecurity and life satisfaction is moderated by the generosity of the countries' labor market policies. In countries where governments spend more money on the unemployed in terms of active and passive labor market policies, the negative association between insecurity and life satisfaction is weaker. Based on a number of primary studies, a recent review by O'Campo et al. (2015: 92) suggest that these buffering effects of generous unemployment insurance benefits may be explained by "the possibility of maintaining an accustomed standard of living" such that the threat of job loss is perceived to be less harmful.

Differences in the experience

A topic that has received less attention in this literature is the heterogeneity in the experience of job insecurity. However, two recent studies by Burgard et al. (2009) and Glavin (2015) based on US panel data examine whether the effects of job insecurity on health are more negative if workers experience chronic or persistent job insecurity compared to episodic insecurity. Supporting the results from early studies (e.g., Heaney et al. 1994) both studies find that only the persistent experience of job



insecurity is consequential for health. Another question that has been addressed is whether jobs that are insecure are similarly detrimental to health as unemployment. Classic stress theories predict that the anticipation of an event can be equally harmful as the experience of the event itself. An early study by Burchell (1994) distinguishes different sub-groups of workers based on a cluster-analysis. One of the clusters consists of workers with an unstable past career, high job insecurity, and low job satisfaction. These workers reported similar well-being as a group of unemployed. However, from this analysis it is unclear of whether it is job insecurity or another single factor or whether it is the combination of different factors that result in these workers' low health. De Witte (1999) compares workers who report insecure jobs with a sample of short-term unemployed, finding that both groups score similar on an indicator of mental health. These results clearly illustrate the need for longitudinal research in order to come to stronger conclusions about whether insecure employment is rather comparable to unemployment or secure jobs (see for example the studies by Gebel and Voßmer 2014 or Grün et al. 2010 who address similar questions with respect to temporary work).

3.3 Qualitative studies on job insecurity

Job insecurity covers a wide range of research and qualitative studies mostly focus on specific groups like care workers (e.g., Hochschild 2000), industrial workers (e.g., Kratzer et al. 2015), or temporary workers (e.g., Brungs and Kolb 2013). We almost found no studies that focus on youth and the relationship of insecure jobs with health and well-being. This may be due to the fact that such research is covered within broader studies that do not focus solely on insecure employment. In the following we briefly discuss three studies.

In an Australian qualitative study McGann et al. (2012) interviewed 72 casual and independent contractor workers (e.g., fruit pickers) in rural Victoria. They find that these workers „experience lowered social status, insecurity and serious limitations to manage their health, psychological well-being and social relations“ (McGann et al. 2012: 1). One third of the interviewees are under the age of 30. They report anxiety about financial issues, lower social participation, and problems of fulfilling a social role (McGann et al. 2012: 6). The fear of job loss sometimes results in taking up more dangerous or too intense work, which increases the risk of occupational injury. The authors point out that “it is clear that nonstandard employment arrangements – and casual employment contracts in particular – do indeed precipitate psychosocial health hazards.” (McGann et al. 2012: 9). A similar answer to the question whether insecure jobs are a threat to well-being is given by Malenfant et al. (2007) in a Canadian study. They interviewed 52 intermittent workers, aged 20-65, using the narrative method and show that the effects of low quality jobs are quite similar to unemployment. The interviewees speak about strong negative feelings like the loss of control and burnout but also highlight the possibility for intermittent work and well-being to coexist in some



cases (Malenfant et al. 2007: 814-835). From another starting point Duff and Chan (2014) examine the interrelation between work and well-being. In their article they asked family members of individuals who have committed suicide about the impact of threats in work on taking one's life and influencing well-being in such a dramatic way. For early-career suicides they find that a perceived lack of autonomy in meeting the career-goals was one of various reasons to commit suicide. These work-related factors are suggested to "enact a state of hopelessness, a sense of dread that there is no way for the person's life to have purpose and joy" (Duff and Chan 2014: 14).



4. Discussion

This review discussed the literature on the effects of labor market exclusion and job insecurity on health and well-being focusing on youth. In the following we briefly summarize the results (see chapter 2.4 for an interim conclusion with respect to the studies on labor market exclusion) and highlight potential avenues for future research.

With respect to youth unemployment the following results stand out. Unemployment negatively affects mental health and well-being and to a lesser extent physical health. Research illustrates that this negative association is unlikely to be explained by health selection alone such that the causal account of most theories is supported. Although more research is needed on this question, the existing studies indicate that the negative consequences of youth unemployment are not only transitory but may persist for several years such that its costs may be underestimated if only the immediate effects are considered. Long-term unemployment and repeated unemployment are associated with more negative effects, although studies for the general population highlight that the unemployed adapt to their situation to some extent. However, research that addresses differences in the experience of unemployment (i.e., duration, reason for job loss and unemployment, repeated unemployment) almost always is based on the adult population leaving open whether the results are similar for youth and young adults.

Moreover, most studies that examine effect heterogeneities are based on the adult population. Although these studies show that the effect of unemployment differs across individuals, social groups, and countries, the results are often inconclusive. For example, contrary to the dominant assumption it is far from clear whether unemployment is more detrimental for the young or the old, females or males, or those with a lower or higher socio-economic status. With respect to country-level moderators the findings are mixed, too. For example, the prominent idea that unemployment hurts less if there is more around is anything but a fact. Indeed, a lot of recent studies suggest that the unemployment rate does not moderate the effect of unemployment on health and well-being at all or even intensifies it. Here it may be interesting to examine whether the results depend on which context is studied (e.g., household, neighborhood, city, state, country). Research about unemployment protection indicates that welfare states are able to buffer the negative effects of job loss to some extent, but again it is not clear whether this result also applies to youth. Given that the eligibility and generosity of unemployment benefits often depends on age, future research should examine differences in the buffering effects for youth and workers in their mid- and late-career. For studies on youth it may be particularly interesting to examine the moderating role of coverage of unemployment insurance. In general, quantitative and qualitative research highlights that future studies have to pay more attention to context in order to explain why, for example, gender differences in the effects of unemployment vary across age groups or different countries. Specifically, qualitative research



emphasizes that the heterogeneity in the experience and effects of unemployment may not be easily captured by examining a single moderating factor and some studies even show that job loss under certain circumstances may have positive effects on health and well-being. Lastly, future studies may use a broader definition of youth at risk of social exclusion and examine whether young adults that are disengaged from the labor market and lack access to training or education face similar or even stronger negative effects with respect to health and well-being.

With respect to job insecurity the results suggest that both temporary employment (objective insecurity) and, in particular, subjective job insecurity can have negative effects on health and well-being. However, more longitudinal research is needed to clarify issues about causation and selection. Moreover, the majority of studies do not focus on youth such that it is unclear how temporary employment and other forms of insecure employment affect youth' health and well-being during their transition from school-to-work and their early career. In contrast to research on unemployment, almost no studies are concerned with the long-term effects of job insecurity such that it is still unclear whether potential negative effects are transitory or persistent. This is particularly relevant with respect to a related question. Are insecure jobs still better than unemployment or do they carry the same psychosocial risks with respect to health and well-being as unemployment? Despite the fact that most research compares insecure jobs to secure ones, the few quantitative and qualitative studies that compare insecure employment to unemployment provide mixed results. While many studies find that temporary employment is advantageous to unemployment, current research does not address whether its positive effects on health and well-being persist. More generally, additional research that conceptualizes employment status as a continuum and combines the often separated research on unemployment and insecure employment is needed.

Similar to the research on unemployment, studies on the health and well-being effects of insecure employment should pay more attention to the circumstances under which these jobs are particularly harmful. Very few studies have examined the individual, social group, or country characteristic that moderate the relationship between subjective and objective insecurity and health. Although the literature has highlighted the importance of distinguishing different forms of insecure jobs (e.g., temporary employment includes fixed-term contracts, temporary agency work, casual/seasonal work), almost no studies focus on young adults in their early career. This is unfortunate given that it is often labor market entrants who gain a foothold in the labor market via insecure employment like training contracts or fixed-term arrangements. A related question is whether it is the episodic experience of insecure jobs or only the chronic exposure to such jobs that causes illness and dissatisfaction. Lastly, the literature on (objective) insecure employment has often focused too much on temporary work neglecting that other employment statuses like informal work or self-employment may carry similar risks for health and well-being, too. Future research would do well in



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locating many different kinds of insecure jobs on the continuum between standard employment and unemployment in terms of their health and well-being effects.



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