

Spillover effects of social policies. Can the state support for the unemployed affect employees' health and wellbeing?

Anna Baranowska-Rataj, Department of Sociology, Umeå University

Björn Högberg, Department of Social Work, Umeå University

Introduction

Massive job losses and the growth of employment uncertainty in the aftermath of the Great Recession spurred public debate on the importance of labour market policies (Card et al. 2016). This discussion has focused on the two main goals: bringing people back to work and diminishing economic hardship among the unemployed. Little attention has been paid to the role of policies for dealing with other consequences of unemployment, such as mental and physical health problems and reduced overall wellbeing (O'Campo et al. 2015). Moreover, the assessments of the effects of labour market policies have been restricted to the most direct beneficiaries of these policies. A standard approach in evaluations of the effects of policies focuses on people receiving government support and treats individuals who resemble beneficiaries in a number of characteristics but do not receive support as the 'control group'. This approach ignores the possibility of spillover effects, i.e. the fact that people who did not receive support from a policy, might still gain from it alongside with the direct beneficiaries (Angelucci & Di Maro 2016; Lundin & Karlsson 2014).

The aim of this report is to provide a review of the effects of labour market policies on health and wellbeing among both the unemployed and employees, but with focus on the latter group. We elaborate on the implications of the economic theory of insurance, as well as the capability approach proposed by Sen (1999), which highlights the role of the ability to decide about oneself. While unemployment implies reduced capabilities, policies giving the unemployed a chance to get involved in alternative activities such as training can be considered as offering agency and improving capabilities. We also relate to theories on the function of work for health postulated by Nordenmark and Strandh (1999) to explain how activities offered within active labour market programs may constitute a functional equivalent to employment and hence affect health and wellbeing positively. Finally, we explain theoretical mechanisms channelling policy impacts beyond the unemployed, i.e. the group of direct beneficiaries of passive and active labour market policies.

Even though the empirical evidence on the benefits of labour market policies for health and wellbeing of employees has been limited, it attracts increasing attention. We summarise the results of from this emerging strand of research. In our review, we focus on studies taking international comparative perspective. This summary is complemented by conclusions from our own studies carried out within an international project "Social Exclusion of Youth in Europe: Cumulative Disadvantage, Coping Strategies, Effective Policies and Transfer" funded by European Commission from the Horizon 2020 programme,

which focused on the impact of labour market insecurity among young people on their health and wellbeing and examined the alleviating role of policies. We also illustrate our main points with original research carried out specifically for the purposes of this report. We discuss policy implications of our findings and the suggestions for future research assessing policy impacts.

Theoretical arguments

Spillover effects of social policies mean that the policies have, usually unintended, consequences for individuals who are not the targets of the policy in question. A social policy externality, or spillover, concerns a situation when a policy affects people who do not directly or currently utilize this policy, that is, who are not the direct and targeted beneficiaries of the policy. A policy directed to the unemployed, such as unemployment benefits, has spillover effects when it also has consequences for people who are not currently unemployed, for instance, employees.

In the following part of this report, we begin by discussing the concept of *stress*, and how it relates to wellbeing, with a special focus on unemployment and employment insecurity. We then explain how social policies can reduce this stress by insuring people from risks, increasing their capabilities, and through these two mechanisms have spillover effects on employees' wellbeing. Then we outline two theoretical arguments can be put forth regarding why the benefits of social policies are not restricted to direct beneficiaries and can have spillover effects on health and wellbeing. The first one derives from the economic theory of *insurance*, while the second is inspired by Nobel laureate Amartya Sen and his concept of *capabilities*. While the empirical focus of this report is on social policies and on support for the unemployed, the argument is described in more general terms, and in principle applies to many areas of social policy besides labour market policies.

Uncertainty, stress and wellbeing

A key factor linking social policies, specifically their spillover effects, to health and wellbeing is reduction of experienced *stress*. Contemporary stress research emphasizes that stress should be understood as demands, perceived or real, that exceeds the capacity of an individual to manage them, specifically demands that are *unpredictable* or *uncontrollable* (Koolhaas et al. 2011). Uncontrollability is also closely related to *structural constraints*, that is, the constrained agency – opportunities and choices – resulting from social disadvantage (Wheaton & Montazer 2010: 173). Facing structural constraints restrict the control a person has over her life, since it prohibits her from actively deciding how to deal with various

(stressful) life situations. Structural constraints and uncontrollable demands give rise to stress reactions, which, if intense and traumatic, or if chronic, can cause both somatic (such as heart disease) and mental (such as depression or anxiety) illness. Many of the most common chronic diseases and causes of death can be generated by stress in this sense, and stress-related diagnoses are among the most common causes of sickness absence in for example Sweden today (Försäkringskassan 2016).

If uncontrollability, unpredictability and structural constraints are generic causes of stress and thereby of poor wellbeing, then the opposite – situations that increase individuals control, predictability and *agency* – can prevent stress. In line with this, research also shows that people tend to experience less stress, or can cope better with stress, when they have enough control and agency over their situation to actively shape their lives according to their preferences. This brings us to the first concept, or mechanism, to be discussed in this report: capabilities, coined by Amartya Sen – Harvard economist, philosopher and Nobel laureate in 1998. Sen defines capabilities as “a person being able to do certain basic things” (Sen 1979: 218), or “the freedom to achieve various lifestyles” (Sen 1999: 75), a definition that is close to how “agency” is typically understood.

The basic idea is that focus should be on what people are *able* to do *should they want to*, not solely on what they actually do, or on what they have. The opportunity to choose and to actively make use of one’s free will has an intrinsic value, over and above the actual outcomes that one’s realized choices lead to. The *opportunity* to do certain things, regardless of whether one actually decides to do them, enhances agency and the control that people have over their lives. With greater scope to act and to decide comes a greater ability to plan one’s life in accordance with the life goals that one finds valuable (Sen 1999). The idea that the ability to do, or to decide not to do, something, is different from actually having or doing this same thing, is rather intuitive. Abstaining from food, because of religious reasons for instance, is not the same thing as not having money to buy food. Likewise, deciding not to work, because one can live off rents, is not the same thing as not being able to find a job. In both these examples, two states lead to the same outcome, but imply vastly different degrees of agency, and only the state implying restricted agency is stressful.

The life situations that can give rise to (chronic) stress reactions are innumerable. What they all have in common is that they either generate excessive, unmanageable demands, or restrict the capacity of individuals to deal with “normal” demands, that is, restricts their agency. Unemployment is a typical life situation that restrict agency, by reducing incomes, disrupting everyday life structures, and constraining

the ability of the unemployed to plan for her future (Fryer 1986). An unemployed individual has a restricted capacity to actively shape her life in accordance with her life goals, which generate stress. Unemployment can also hurt health directly, since reduced incomes and higher poverty risks constrain the ability of the unemployed to afford healthy food, health care, participation in social activities and so on (Brand 2016).

Besides the stress generated by unemployment itself, the very *anticipation* of unemployment can be a significant source of stress, and studies show that both perceived and real employment insecurity cause anxiety and poor wellbeing (Kim & von dem Knesebeck 2015). The impact of perceived job insecurity may actually exceed the negative effects of actual job separation, especially when it is experienced for a long time (Burchell 2011; Burgard et al. 2009). Therefore, employees may be at risk of poor mental and physical health due to anticipated unemployment to a similar degree as the unemployed. At the same time, one can argue the presence of policies reducing the harmful effects of unemployment on health and wellbeing may promote better health and wellbeing not only among the unemployed but also among people have jobs but experience stress about losing them. Several studies show that job insecurity is less detrimental for health if the individual view herself to be “employable”, and that she will have good opportunities to get a new job if she loses her current one (Green 2011; Vulkan et al. 2015; Silla et al. 2009). Some studies even show that employability can fully offset the negative effects of insecurity, such that workers who experience high job insecurity but simultaneously regard themselves as having high employability have the same wellbeing as secure workers (Vulkan et al. 2015). If this is the case, then institutional factors – such as policies – that reduce insecurity, or increase perceived employability, can be expected to improve wellbeing.

The protective role of social policies

Having discussed how lack of control and predictability, and structural constraints, can give rise to stress and thereby to poor health and wellbeing, it is not difficult to imagine how different kinds of social policies can be used to break this negative chain. Social policies that reduce uncertainty and increase the control and agency people have over their lives, can to reduce stress and thereby be beneficial for wellbeing. Specifically, policies that provide insurance against risks, or policies that ease structural constraints faced by the unemployed, should be of particular importance. We will in the next section dig deeper into the

research that has examined this empirically, but before that, we will elaborate some more on the mechanisms involved.

The reason why social policies can be beneficial for the direct utilizers, such as the unemployed when it comes to labour market policies, is rather obvious. Policies that remove, partially or completely, the constraints on agency that follow from unemployment will reduce the stress emanating from the unemployment situation. An unemployed person who receives adequate unemployment benefits will accordingly benefit from these insofar as higher incomes helps her pursue desirable life goals. The same unemployed person will also gain from participating in effective training programs, insofar as since these increase her employment prospects, and compensate for the lack of time structure and social contacts of the unemployment situation. Both of these aspects increase agency, and the control over the unemployment situation.

Why these same policies should benefit the wellbeing of non-users, such as people with employment, is perhaps less clear at first sight. The explanation is, of course, that these policies can reduce stress by offering certainty, control and agency for all those who *potentially* need to rely on them. By impacting on either the insurance or the capability mechanism, social policies can buffer the negative stress resulting from, in this context, the *risk* of unemployment. The welfare state is, in a way, the largest insurer there is, and through social insurance, it protects citizens against various social risks, such as unemployment (Barr 2012). When we “buy” social insurance, through insurance contributions, we thereby also “buy” control, predictability and peace of mind (Haushofer et al. 2017). Therefore, even if the social insurance is never utilized in the sense of “cashing in” by, for instance, receiving unemployment benefits, it still confers a value to all who are covered by it and who experience *risks* covered by the insurance, that is, to *potential* users.¹

¹ The way through which insurance reduce stress is, in fact, rather intuitive. After all, most of us voluntarily spend large sums every year buying insurance for our homes, cars, vacations etc. We do this precisely because we do not like risk and by buying insurance, we buy control. The economic term for this is “risk aversion”, meaning that most of us prefer a certain payoff to an uncertain one, even if the uncertain payoff can be higher. In other words, certainty in itself provides us with some value, or “utility” as economists call it. Risk aversion as a scientific concept is rather modern, but the core insight is older: The English proverb “a bird in the hand is worth two in the bush”, which expresses the same thing, has been known since the middle ages, and similar proverbs exist in many languages.

Thus, if someone worries about the risk that she might lose her job and her income, then this will be very stressful to her, and research show that job insecurity can be as detrimental as actual unemployment (Kim & von dem Knesebeck 2015). However, it is not the job loss in itself that causes stress, but the negative *consequences* of losing a job, particularly the loss of income, but also the general sense of agency that comes with having a job. If these negative consequences are countered by adequate unemployment benefits, the threat of job loss will be less stressful (Sjöberg 2010). Also, if effective active labour market policies are available, then many unemployed people will likely deem the prospects of getting a new job to be more positive, thereby reducing the stress associated with job insecurity. Active labour market programs can, in this sense, be seen as a form of human capital insurance: by offering training or education, the government insures against skills becoming obsolete due to, for instance, structural changes in the economy.

With regard to capabilities, what is perhaps most noteworthy when one looks at the welfare state through the lens of capability theory is that many social policies enhance the capabilities even of those who do not directly and presently utilize said policies. Thus, just like social insurance can have spillover benefits by preventing risks, social policies can have spillover benefits by increasing agency and opportunities. Let us take unemployment as point of reference again. If people believe that education can improve their future job prospects, a fairly reasonable assumption, then the mere *opportunity* to access education can reduce stress. The availability of education in itself reduce structural constraints, enhances agency, and the control over one's life. This should hold especially for unemployed people, who often have an urgent need of education, but it can also be valid for anyone who, for whatever reason, feel a need for a new start in their lives, and for whom education can offer such a start. In short, access to education offer people control over their lives, regardless if they (presently) utilize it or not.

A similar argument can be made with regard to active labour market programs. Even if not all unemployed people decide to participate in for instance training programs, the mere opportunity to do so increase their capabilities, and the control that they have over their situation. We mentioned previously that the negative effects of unemployment arise due to how unemployment restricts the agency, and capability, of the unemployed. The spillover effects from active labour market programs can thus be understood from the perspective of the capability theory as well: access to education and training programs in themselves strengthen agency among the unemployed. One can, moreover, argue that the mere availability of training programs increase the capabilities also of workers who have obsolete or inadequate

skills, and therefore have a need to update these skills, but who are not (presently) unemployed (Carr & Chung 2014). We see here that the insurance and capability enhancing functions of social policies can overlap: the same policy, e.g. training programs, can be seen as an insurance against obsolete skills, and as an capability enhancing opportunity that reduce structural constraints faced by workers. From both perspectives, it has the potential to reduce stress levels and thus improve wellbeing and health.

While many theory-driven arguments postulate that the mechanisms protecting wellbeing and health may apply to both passive and active labour market policies, recent studies indicate that the protective impact of the latter may be much weaker or more heterogeneous. First of all, some active labour market policies such as vocational training programs or job creation measures not only affect the employability of unemployed individuals, but also may provide a functional equivalent to employment (Nordenmark & Strandh 1999; Strandh 2001). Furthermore, active labour market policies differ in how they are implemented, some measures have an enforcing character and may be perceived as paternalistic, which may substantially reduce their beneficial role for population health (Wulfgramm 2014). Moreover, the employability gains from some of these policies may come partly at the expense of individuals who did not happen to get the chance of participating in a labour market program (Crépon et al. 2013). In addition, it has been stressed that some active labour market policies may be associated with lock-in effects, because they leave participants with no time for job search due to their program participation, which may be experienced as stressful and impede wellbeing instead of improving it (Voßemer et al. 2018). These arguments point to the fact that assessment of the spillover effects of active labour market policies requires recognising the diversity of measures, and needs to consider the way that these measures may be perceived by specific groups of actual and potential participants.

Previous research

This section presents the available empirical evidence regarding how social policies, such as unemployment benefits, subsidised employment or training programs, can have consequences for health and wellbeing. We argued previously that social policies directed towards the unemployed, can benefit the health and wellbeing of other groups in the general population. Here we discuss the cross-country comparative research that illustrates this point. We focus on two key types of policies supporting the unemployed: unemployment benefits, which are considered as passive labour market policies, and active labour market policies, which include training, subsidised employment and hiring incentives.

Unemployment benefits

While empirical research confirming the protective role of unemployment benefits for health and wellbeing of the unemployed is quite extensive (for a recent meta-analysis reviewing the abundant evidence, see e.g. O'Campo et al. 2015), only few studies examined its potential positive role for the employed. Some studies investigated how wellbeing of the whole working age population is affected by these policies, without distinguishing between the unemployed and people doing paid work. For example, Ochsen and Welsch (2006) found no evidence of the positive impact of durations of unemployment benefits when analysing combined samples of unemployed and employed. Ochsen and Welsch (2006) argued that the benefits of the unemployment protection system may be offset by associated costs that they impose on the public budget. A more recent study by Ferrarini et al. (2014) used data for 23 countries within European Union to examine the role of different aspects of generosity of unemployment benefits, such as the coverage and income replacement rates². They found that unemployment benefits coverage reduces the risk of poor health. Somewhat surprisingly, authors also found that income replacement of unemployment benefits increase the risk of poor health, however, this effect approaches zero at higher coverage rates. This study has also shown that a high coverage of unemployment benefits brings more benefits for the lowest educated people, who are at relatively higher risk of unemployment. Still, this study did not explicitly investigate how the effects of unemployment benefits look like for the unemployed and employees considered separately.

One of the few exceptions of research investigating the health effects of unemployment benefits separately for the two key labour market groups is a study carried out by Di Tella et al. (2003), who used data for 11 European countries followed over period 1975-1992. This study has shown that higher income replacement rates of unemployment benefits are associated positively with subjective wellbeing among both employed and unemployed. Interestingly, the effects in both groups were quite similar. More extensive studies by Sjöberg (2010) used data for 21 European countries have shown that generosity of unemployment benefits as measured by a synthetic index combining replacement rate, benefit duration and average expenditures at the national level affects subjective well-being of both unemployed and employed individuals. This research confirmed that policies which are targeting the unemployment may

² High coverage indicate that relatively many unemployed actually do receive unemployment benefits, a situation observed when the rules of access to these benefits are not strict and do not prevent people in need from receiving this form of support. Income replacement rate measures to what degree an unemployment benefits may compensate for a lack of earnings.

also be helpful for the employed. However, a study by Voßemer et al. (2018) presented results that contradict this idea. Using data for a large number of countries and observing the changes of policies over time, Voßemer et al. (2018) found that while higher unemployment benefits buffer the negative effects of unemployment on wellbeing, they do not protect the wellbeing of the employed. This discrepancy merits some attention. The results from the two studies discussed above cannot be directly compared because they considered different groups of employees. While Sjöberg (2010) considered all the employees as a homogenous group, Voßemer et al. (2018) focused on employees who are in most vulnerable position, i.e. workers with fixed term contracts and those who have no employment contracts at all. Nevertheless, temporary and informal workers are precisely the groups that experience higher economic insecurity than workers with permanent contracts, and thus could be particularly likely to benefit from a generous unemployment benefit system. Hence, more research is needed to improve our understanding of whether, and under what conditions, can benefits from financial support for the unemployed extend over employees.

Active labour market policies

Several studies from different countries have found positive effects on wellbeing of participation in active labour market programs, including in Sweden (Korpi 1997; Strandh 2001), Germany (Wulfgramm 2011), the US (Vinokur & Schul 1997), and Great Britain (Andersen 2008). Some studies have found that participation in training is even equivalent with regular employment in terms of wellbeing (Andersen 2008), and that the positive impact remains for many years after termination of the program (Andersen 2008; Strandh et al. 2015). Wulfgramm (2011) found that the positive effects on wellbeing of participation were driven by enhanced perceived employment prospects among participants. Moreover, workplace training have strong and long-term effects on perceived job security, which is known to cause stress and poor wellbeing (Kohlrausch & Rasner 2014). In sum, the evidence for positive effects on wellbeing of participation in active programs labour market are rather strong.

As arguments postulated in the previous section indicate, there are reasons to think that the positive effects of active labour market policies may apply both to the participants in active labour market programs, and extend to individuals doing paid work by reducing insecurity (Chung & Mau 2014). Participation in activation policies can improve the wellbeing of the unemployed by offering them agency and a greater sense of control over their situation. The mere opportunity to participate in for instance

effective training programs that increase employment prospects (and bring other types of benefits) enhance the agency and the control. And yet, empirical studies investigating the benefits from active labour market policies on health and wellbeing of employees are scarce. To the best of our knowledge, there are only two studies that address this issue empirically, and they provide contradictory findings. Reeves et al. (2015) showed that higher spending on active labour market policies made the association between unemployment rates and suicide rates at the country-level less strong during the financial crisis 2007-2011. In other words, when countries invested more in active support for the unemployed, higher unemployment rates were less detrimental in terms of suicide rates in the whole population (which includes both employed and unemployed). Voßemer et al. (2018), on the other hand, found that higher spending on active labour market policies was associated with a more negative effect of unemployment on wellbeing and health, but not with wellbeing and health among employees with insecure jobs.

Other studies, not focused on health but looking at outcomes directly shaping wellbeing, indicate that active labour market policies may bring benefits also for employed individuals. Specifically, studies have looked at how active labour market policies can influence perceived employment or job security among employees. For instance, Anderson and Pontusson (2007: 224) found that “government spending on active labour programs generates more positive assessments of alternative employment prospects” and decrease perceived employment insecurity. Chung and van Oorschot (2011) and van Oorschot and Chung (2015) found that insecurity is lower when investment on active labour market and life-long learning policies is more generous, but, like Wulfgramm (2014), they find it difficult to disentangle the role of activation policies from that of unemployment benefits and also overall economic conditions. Lübke and Erlinghagen (2014), on the other hand, found somewhat contradictory results: spending on activation decreased the perceived likelihood of job loss (job insecurity) but seemed to increase the perceived difficulty of job search (similar to employment security).

Carr and Chung (2014) showed that the relationship between employment insecurity and wellbeing is much stronger in countries with low investments in active labour market policies, such that insecure workers have poorer wellbeing in countries with meagre active policies. In fact, when the policies are most generous, there is no relationship at all between perceived employment security and wellbeing. The authors explain it as “most likely [being] due to the employability enhancing role of active LMPs” (Carr & Chung 2014: 392). In line with these results, Niedzwiedz et al. (2016) found that people with low education, who experience more insecurity in the labour market, experienced clearly higher wellbeing, as

measured by a depression screening tool, when spending on active policies were more generous. No or even opposite effects are found for people with high education, meaning that active labour market policies are associated with reduced educational inequalities in wellbeing.

Finally, Anderson (2009) analysed how active policies shape another dimension of subjective wellbeing, i.e. feelings of social inclusion. His results show that all groups in the labour market seemed to gain from more generous activation policies, but the effects were much stronger for the unemployed and those with temporary employment as compared to employees with stable jobs.

Empirical evidence

Given scarcity of research on this topic, in this report we supplemented the summary of prior studies with our own analyses. We used data from an ad-hoc module on wellbeing in the survey “European Statistics on Income and Living Conditions” (EUSILC) carried out in 2013. This survey is coordinated by Eurostat and includes all the European Union member countries as well as Switzerland and Norway. EUSILC provides extensive information about individual characteristics, labour market status, as well as type of employment contract. The ad-hoc module additionally informs about mental health and wellbeing (for more details on the design of this ad-hoc module, see De Smedt 2013).

We constructed a measure of mental health problems using the five-item Mental Health Inventory (MHI-5). The MHI-5 captures four major dimensions of mental health: anxiety, depression, loss of behavioural or emotional control, and psychological wellbeing (Berwick et al. 1991). The MHI-5 is scored from 0 to 100, higher scores indicate that individuals participating in the survey indicated more symptoms of mental health problems. Berwick et al. (1991) found the MHI-5 to be a viable tool for the identification of clinical depression, however, the MHI-5 is not a clinical diagnostic instrument, but instead a measure of depressive or anxious symptoms. In our analytical sample, MHI-5 scores on average 29 for employees and 41 for the unemployed.

In order to understand how social policies affect symptoms of mental health problems among the unemployed and employees, we estimated multilevel models. Multilevel models have the advantage that they allow to assess the role of macro-level factors such as social policies while controlling for differences in the composition of analysed populations or social categories as well as for macro-economic factors such as the aggregate unemployment rate. We used MHI-5 scores as the dependent variable, and the set of

control variables including age, education attainment and country of birth. We also controlled for country-specific unemployment rates.

Our key variables were indicators of passive and active labour market policies. Specifically, we use a measure of generosity of unemployment benefits proposed by Israel and Spannagel (2018). This indicator of generosity of unemployment benefits combines information on both replacement rates and coverage of the unemployment benefits. It was normalised and hence the values ranged from 0 to 100. We also use measures of expenditures on different types of active labour market policies provided by Eurostat. We focus on the policies that have highest coverage and that are related to highest expenditures, i.e. job search assistance programmes, training and hiring incentives. We use measures of expenditures on each specific type of policy in purchasing power parity (PPP) per unemployed person. By choosing PPP as a unit, we take into account the differences in costs and prices across European countries. By dividing the total expenditures by the number of the unemployed who receive them, we make our analyses reflect the effects of financial effort of government to provide certain forms of support for the unemployed. Calculated this way, these indicators also may capture to some degree the quality of services supporting the unemployed. We standardise these measures so that they take values from 0 to 100 running from the country with lowest to highest expenditures.

We estimated models for the following labour market groups: the unemployed, all employees, employees with fixed term contracts as well as involuntary part-time workers. Involuntary part-time workers were defined as individuals working less than 30 hours weekly because of difficulties in finding a full-time job. Within each category, the sample was restricted to people aged between 20 and 60 years and separate models were run for men and women. In the following part of this report, we present our results graphically on the bar charts. Grey bars correspond to the statistically significant effects of policies on symptoms of mental health observed among specific labour market groups estimated in our models. Dashed bars represent coefficients in our models that turned out not to be statistically significant at 0.1 level.

Unemployment benefits

Our results indicate that for unemployed men, an increase in generosity of unemployment benefits may significantly reduce symptoms of mental health problems. If we compare the unemployed in two countries at the extremes of the ranking of generosity of unemployment benefits, the symptoms of

mental health problems are reduced by over 12 scores (see Figure 1a). A similar comparison for the employed men shows that this group may also benefit from more generous unemployment benefits. Overall, symptoms of mental health problems are reduced by 7 scores if a country changes this policy from the least to the most generous. The generosity of unemployment benefits matters more for employees with fixed term contracts, who are at higher risk of losing their jobs and for involuntary part time workers. The results for women show that generosity of unemployment benefits does not moderate symptoms of mental health problems among the unemployed or employees (Figure 1b).

Figure 1a. The moderating role of generosity of unemployment benefits for mental health problems among men.

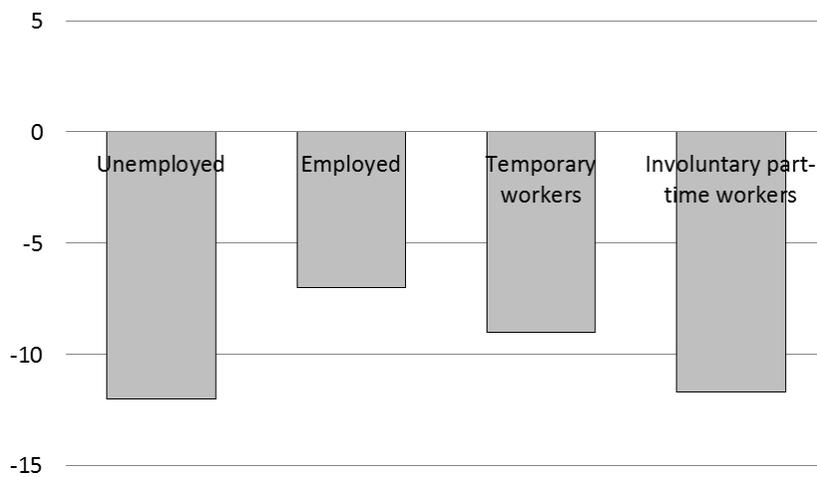
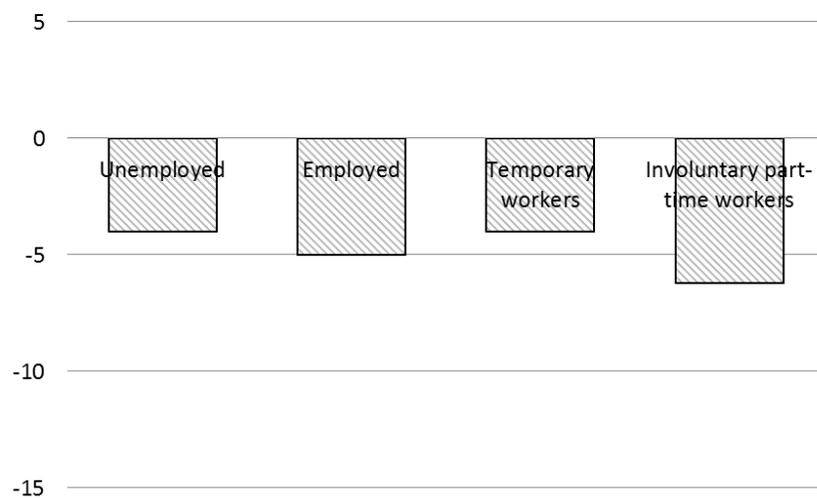


Figure 1b The moderating role of generosity of unemployment benefits for mental health problems among women



Source: EU-SILC 2013. Own calculations based on results from multilevel models controlling for age, education attainment and country of birth and unemployment rate. The vertical axis represents a reduction in symptoms of mental health problems as measured by MHI-5 index.

Active labour market policies

The main type of non-financial support that the unemployed may receive from the state are job search assistance programmes. This is the category of active labour market policies that typically absorbs most public funding. The unemployed may receive ad hoc information about emerging vacancies, referrals to opportunities for work, as well as more individualised assistance in the form of counselling and guidance, and financial support to attend interviews. We carried out analyses to see whether the level of expenditures on these measures is associated with fewer symptoms of mental health problems among different labour market groups. Our results suggest that expenditures on job search assistance reduce symptoms of mental health problems among unemployed men, but the effect is not statistically significant (see Figure 2a). We find positive effects of this policy for all male employees, with a reduction in scores measuring symptoms of mental health problems of 6 points. Male employees with fixed term contracts tend to benefit from this type of policy relatively more than all employees on average. Within the group of temporary workers, symptoms of mental health problems are reduced by 8 scores if we compare countries with the lowest and the highest expenditures on job search assistance programmes. The results for involuntary part-time workers were not statistically significant. The results for women show that expenditures on job search assistance programmes do not moderate symptoms of mental health problems neither among the unemployed nor among employees (Figure 2b).

Figure 2a. The moderating role of expenditures on job search assistance for mental health problems among men.

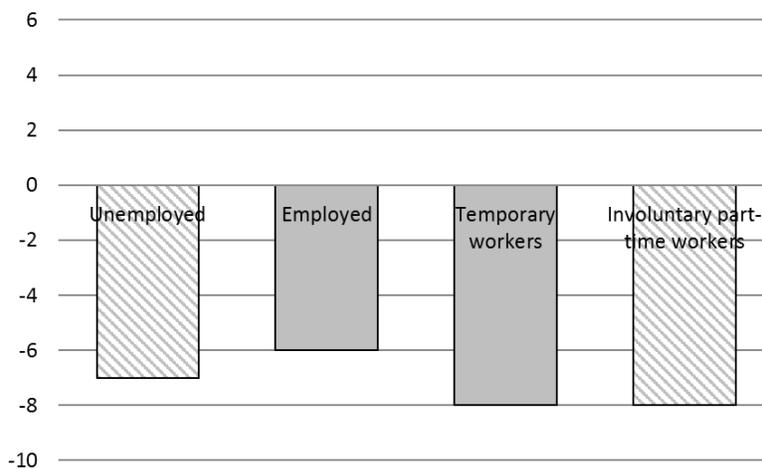
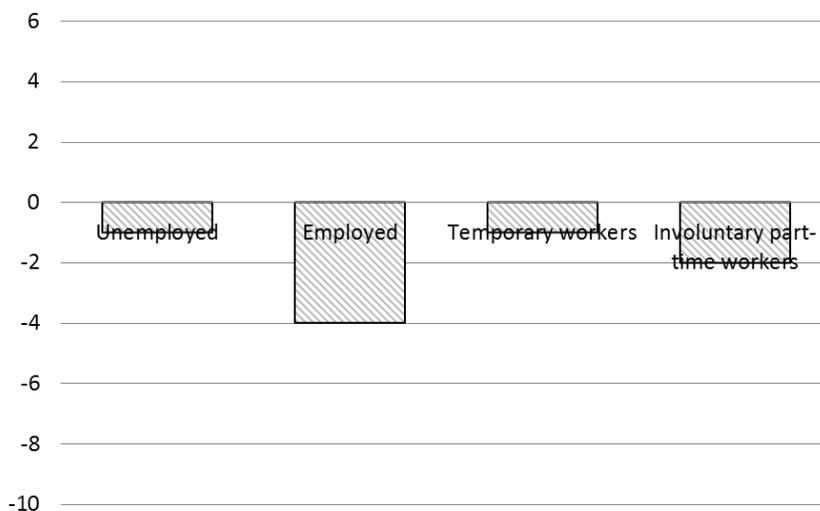


Figure 2b The moderating role of expenditures on job search assistance for mental health problems among women



Source: EU-SILC 2013. Own calculations based on results from multilevel models controlling for age, education attainment and country of birth and unemployment rate. The vertical axis represents a reduction in symptoms of mental health problems as measured by MHI-5 index.

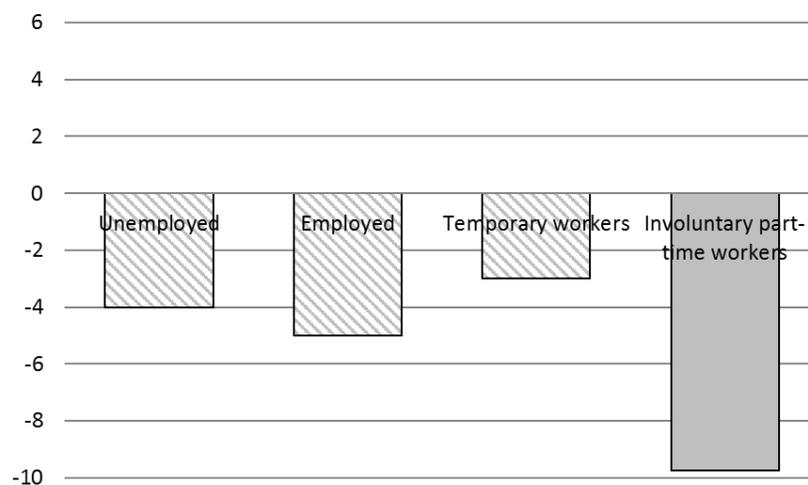
Another form of support for the unemployed are different types of training, offered either as classic courses with classroom teaching provided by schools, colleges and training centres, or at the workplace with supervision carried out specifically for the purpose of instruction (here, apprenticeships are a typical example). Our results indicate that among men, the effects of these policies on symptoms of mental health can be observed both among the unemployed and the employed, although obviously the former group benefits more from the state support. Compared to the unemployed who live in a country with

lowest expenditures on training, those living in a country with highest expenditures score 10 points less on our measure of symptoms of mental health problems. Employees score 8 points less regardless of whether they have permanent or temporary contracts. For part-time workers, the effect is smaller and amounts to 4 scores, but it is still statistically significant. Among women, we do not observe any significant effects within the category of unemployed, except for female workers who have part-time jobs in spite of willing to work full time. In this category, the positive effect of expenditures on training are actually quite large: Compared to the part-time workers who live in a country with lowest expenditures on training, those living in a country with highest expenditures score 10 points less on our measure of symptoms of mental health problems.

Figure 3a. The moderating role of expenditures on training for mental health problems among men.



Figure 3b. The moderating role of expenditures on training for mental health problems among women.



Source: EU-SILC 2013. Own calculations based on results from multilevel models controlling for age, education attainment and country of birth and unemployment rate. The vertical axis represents a reduction in symptoms of mental health problems as measured by MHI-5 index.

Hiring incentives are a rather complex type of support from the state, which encompasses subsidies for open market jobs. Usually, the funding from the state represents a contribution to the overall labour costs of the participants of this measure and, typically, the majority of the labour costs are still covered by the employer. The unemployed may also receive back-to-work bonuses or relocation allowances in case if a new job is located in a region far away from the place of residence. It should be noted that support in the form of job subsidies may be also offered to the employees at risk of involuntary job loss (for example, due to a bankruptcy of their employer) in order to ensure that they stay attached to the labour market.

Our analyses show that expenditures on these measures do not decrease symptoms of mental health problems among any of the labour market groups. Both for men and for women, all the effects are small and not statistically significant.

Figure 4a. The moderating role of expenditures on hiring incentives for mental health problems among men.

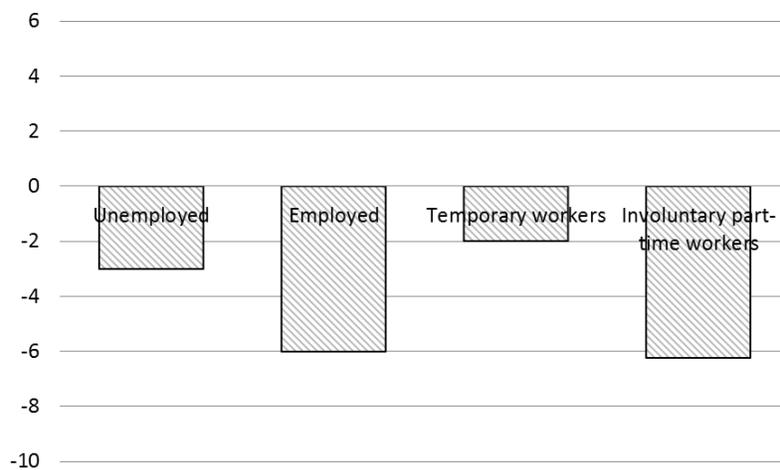
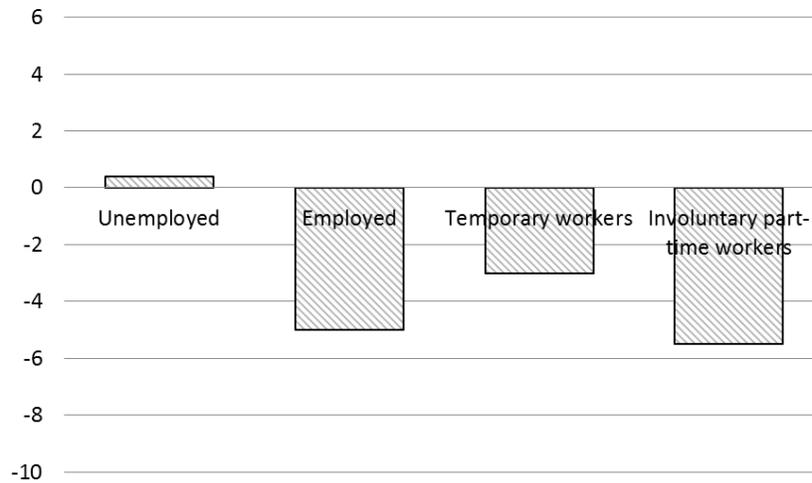


Figure 4b. The moderating role of expenditures on hiring incentives for mental health problems among women



Source: EU-SILC 2013. Own calculations based on results from multilevel models controlling for age, education attainment and country of birth and unemployment rate. The vertical axis represents a reduction in symptoms of mental health problems as measured by MHI-5 index.

Conclusions

The growth of unemployment which followed the Great Recession resulted in tensions related to raising needs for public spending on the support for people who lost their jobs on the one hand, and increased budget constraints to do so. The public debate on how to allocate public resources to alleviate the consequences of job losses is further complicated by the fact that evaluations of social policies often call the efficiency of these state efforts into question. In this report we would like to highlight that a number of potential benefits of social policies may have been overlooked in this debate. First, evaluations of social policies tend to focus on economic outcomes, such as (re-)employment of people who lost their jobs. However, population health and wellbeing is another important dimension of the effects of social policies. Second, evaluations of social policies often assume that the benefits from participation in policy programmes are restricted to those individuals who became directly involved in them. Far too often it is taken for granted that employees cannot benefit from policies offered to the unemployed. As a result, the overall assessment of the effects from public investment in policy programmes omits the gains achieved by these potential “indirect” beneficiaries. Since program evaluations do affect public debate and policy choices, underestimating the benefits from the state support for the unemployed likely leads to underinvestment in social policies.

This report presented key theoretical arguments for considering spillovers in the effects of social policies on health and wellbeing. We also summarized the results of available studies investigating whether the positive effects of public spending on passive and active labour market policies may go beyond the unemployed and bring benefits for the employed, especially those with more vulnerable positions, such as temporary contracts or informal employment. Our review revealed that the empirical evidence on this topic is very limited. However, overall, the few available studies suggest that spillover effects of social policies should not be further ignored in research and in the debate on the allocation of public spending. There is some evidence that generosity of unemployment benefits improves health not only among the unemployed, but also among employees (Di Tella et al. 2003; Sjöberg 2010) and that active labour market policies raise workers' feelings of social inclusion and decrease job insecurity, thereby improving wellbeing (Anderson 2009; Anderson & Pontusson 2007; Carr & Chung 2014; Chung & van Oorschot 2011). Nevertheless, some studies also point to no effects or even harmful effects of governmental spending on social policies (see e.g. Lübke & Erlinghagen 2014; Voßemer et al. 2018).

This discrepancy might be related to the fact that the direction and the magnitude of spillover effects depends on the specific type of policies as well as on the specific group within the broad category of employees. For example, policies may bring benefits for both unemployed and employed only if they are actually regarded as alleviating financial consequences and improving future employability. Also, employees' health and wellbeing may be more likely to benefit from social policies if policies match employees' needs. For instance, workers who experience economic insecurity or employment uncertainty may benefit more from generous unemployment benefits as well as opportunities to receive training or assistance in finding a new job. Hence, assessments of the spillover effects of social policies should carefully examine which policies might help and for whom, instead of looking at the average effects of all policy measures taken together.

Indeed, in our own empirical study prepared for the purposes of this report, we found that social policies may affect mental health of both the unemployed and employees, but the magnitude of these effects varied across policy types. Also, we found diverging effects of policies across population subgroups. Most positive effects of policies that we focused on in this report were observed among men but appeared to be much weak or even non-existent among women. We expected the benefits of passive and active labour market policies to be particularly strong among workers with employment contracts that imply elevated unemployment uncertainty, i.e. those with fixed term contracts and part-time jobs, but we actually did

not find large disparities between those groups and workers with standard, permanent contracts. This means that while workers with non-standard contracts are a more vulnerable labour market group, employees with standard contracts can still also be considered as potential beneficiaries of social policies.

Overall, even though our results point to associations instead of identifying causal effects of policies, these findings suggest that the possibility of spillover effects of social policies should not be ignored in research and in public debate. In our analyses, we do observe correlations between some measures of state effort to alleviate the consequences of unemployment and wellbeing of both unemployed and employed individuals. Our results indicate that the presence of positive effects of public expenditures may depend on how exactly they are spent, as some policy measures appear to have rather strong effects on population health and others seem to bring no benefits at all. Specifically, we found that (among men) expenditures on unemployment benefits, job search assistance and training decrease symptoms of mental health problems, but we did not observe any positive impact of hiring incentives. This could be related to the fact that unemployment benefits, job search assistance and training are perceived as forms of support that actually do improve the situation of the unemployed by alleviating the financial consequences of losing a job and raising chances for finding employment in future. Indeed, previous research found that job search assistance and training yield relatively favourable impacts on re-employment, whereas hiring incentives were found to be much less effective (Card et al. 2010).

Our findings also suggest that whether or not we observe the benefits of policies may depend on which specific labour market group we look at. Our analyses revealed that even though the benefits of social policies are somewhat larger for more vulnerable groups of workers, such as temporary and involuntary part-time workers, their benefits are not diametrically different from those observed among all employees on average. Instead, we observed substantial disparities across gender. These gender differences could be explained in a number of ways. One possible explanation may be related to the differential meaning of work (and lack thereof) for men and women in Europe. Previous research shows that unemployment affects mental health of men to a much higher degree than among women (Paul & Moser 2009). If that's a fact, it is not surprising that the benefits of policies supporting the unemployed are stronger among men as well. Another possible explanation is that while male workers may be mostly concerned with the financial consequences of possible job losses, women's health and wellbeing may be more affected by a work-family conflict. If this is the case, social policies improving possibilities to reconcile work and parenthood and reducing gender inequality may be more consequential for women's

wellbeing than financial support that becomes available only after women stop working (Grönlund and Öun 2010; Van de Velde et al. 2013).

References

- Andersen, S.H. (2008). The Short- and Long-Term Effects of Government Training on Subjective Well-Being. *European Sociological Review*, 24(1): 451–462.
- Anderson, C.J. and Pontusson, J. (2007). Workers, worries and welfare states: Social protection and job insecurity in 15 OECD countries. *European Journal of Political Research* 46(2): 211–235.
- Anderson C.J. (2009). The private consequences of public policies: active labor market policies and social ties in Europe. *European Political Science Review*, 1(3): 341–373.
- Angelucci, M. & Di Maro, V. (2016). Programme evaluation and spillover effects. *Journal of Development Effectiveness*, 8, 22-43.
- Barr, N. (2012) *The economics of the welfare state*. Oxford : Oxford University Press
- Bentolila S. & Jansen M. *Long-Term Unemployment After the Great Recession: Causes and remedies*. London: A VoxEU.org Book, CEPR Press.
- Berwick D.M., J.M. Murphy, P.A. Goldman, J.E. Ware, A.J. Barsky, & M.C. Weinstein (1991). Performance of a five-item mental health screening test *Medical Care*, 29, 169-176.
- Brand, J. E. (2015). The far-reaching impact of job loss and unemployment. *Annual review of sociology*, 41, 359-375.
- Burchell, B. (2011). A Temporal Comparison of the Effects of Unemployment and Job Insecurity on Well-Being. *Sociological Research Online* 16(9):1–20. Google Scholar, SAGE Journals
- Burgard, S. A., Brand, J. E., & House, J. S. (2009). Perceived Job Insecurity and Worker Health in the United States. *Social Science & Medicine* 69(5):777–85.
- Card, D., Kluve, J., & Weber, A. (2016). Active labour market policies and long-term unemployment. In: Bentolila, S., & Jansen, M. (eds.) *Long-Term Unemployment After the Great Recession: Causes and remedies*. London: A VoxEU.org Book, CEPR Press.
- Card, D., Kluve, J., & Weber, A. (2010). Active labour market policy evaluations: A meta-analysis. *The Economic Journal*, 120(548): F452-F477.
- Carr, E. & Chung, H. (2014) Employment insecurity and life satisfaction: The moderating influence of labour market policies across Europe. *Journal of European Social Policy*, 24(4): 383–399.
- Chung, H. & van Oorschot, W. (2011). Institutions versus market forces: Explaining the employment insecurity of European individuals during (the beginning of) the financial crisis. *Journal of European Social Policy*, 21(4): 287-301.
- Chung, H. & Mau, S. (2014) Subjective insecurity and the role of institutions. *Journal of European Social Policy*, 24: 303-318
- Crépon, B., Duflo, E., Gurgand, M., Rathelot, R., & Zamora, P. (2013). Do labor market policies have displacement effects? Evidence from a clustered randomized experiment. *The Quarterly Journal of Economics*, 128(2): 531-580.
- De Smedt, M. (2013). Measuring subjective issues of well-being and quality of life in the European Statistical System. *Social Indicators Research*, 114(1): 153-167.
- Di Tella, R., MacCulloch, R. J., & Oswald, A. J. (2003). The macroeconomics of happiness. *Review of Economics and Statistics*, 85(4): 809-827.
- Ferrarini, T., & Sjöberg, O. (2010). Social policy and health: transition countries in a comparative perspective. *International Journal of Social Welfare*, 19, S60-S88.

- Ferrarini, T., Nelson, K., & Sjöberg, O. (2014). Unemployment insurance and deteriorating self-rated health in 23 European countries. *J Epidemiol Community Health*, 68(7): 657-662.
- Fryer, D. (1986). Employment deprivation and personal agency during unemployment: A critical discussion of Jahoda's explanation of the psychological effects of unemployment. *Social Behaviour*, 1(1): 3-23.
- Försäkringskassan (2016) Sjukfrånvarons utveckling 2016 [The development of the sickness absence 2016]. *Socialförsäkringsrapport 2016:7* [Social Insurance Report 2016:7]
- Green, F. (2011) Unpacking the misery multiplier: how employability modifies the impacts of unemployment and job insecurity on life satisfaction and mental health. *Journal of Health Economics* 30(2): 265-76.
- Grönlund, A., & Öun, I. (2010). Rethinking work-family conflict: dual-earner policies, role conflict and role expansion in Western Europe. *Journal of European Social Policy*, 20(3): 179-195.
- Haushofer, J., Chemin, M., Jang, C., Abraham, J. (2017) "Peace of Mind": Health Insurance Reduces Stress – Evidence from a Randomized Experiment in Kenya. Working paper, January 2017.
- Höhberg, B., Strandh, M., Gebel, M. & Vossemmer, J. (2018). Unemployment, wellbeing and the moderating role of education policies - A multilevel study. (*forthcoming*)
- Israel, S., & Spannagel, D. (2018). Material deprivation in the EU: A multi-level analysis on the influence of decommodification and defamilisation policies. *Acta Sociologica*, (advanced access).
- Kim, T.J., von dem Knesebeck, O. (2015) Is an insecure job better for health than having no job at all? A systematic review of studies investigating the health-related risks of both job insecurity and unemployment. *BMC Public Health*. 15:985.
- Kohlrausch, B. & Rasner, A. (2014). Workplace training in Germany and its impact on subjective job security: Short- or long-term returns? *Journal of European Social Policy*, 24(4): 337– 350.
- Koolhaas, J.M., Bartolomucci, A., Buwalda, B., de Boer, S.F., Flügge, G., Korte, S.M., Meerlo, P., Murison, R., Olivier, B., Palanza, P., Richter-Levin, G., Sgoifo, A., Steimer, T., Stiedl, O., van Dijk, G., Wöhr, M., Fuchs, E.. (2001) Stress revisited: a critical evaluation of the stress concept. *Neuroscience and Biobehavioral Reviews*. 35(5):1291-301.
- Korpi, T. (1997). Is utility related to employment status? Employment, unemployment, labor market policies and subjective well-being among Swedish youth. *Labour Economics* 4(2): 125-147.
- Lundin, M. & Karlsson, M. (2014). Estimation of causal effects in observational studies with interference between units. *Statistical Methods & Applications*, 23, 417-433.
- Lübke, C. & Erlinghagen, M. (2014) Self-perceived job insecurity across Europe over time: Does changing context matter? *Journal of European Social Policy*, 24(4) 319– 336.
- McKee-Ryan, F., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and physical well-being during unemployment: a meta-analytic study. *Journal of Applied Psychology*, 90(1), 53-76.
- Niedzwiedz, C.L., Mitchell, R.J., Shortt, N.K., & Pearce, J.R. (2016). Social protection spending and inequalities in depressive symptoms across Europe. *Social Psychiatry and Psychiatric Epidemiology*, 51(7):1005-14.
- Nordenmark, M., & Strandh, M. (1999). Towards a sociological understanding of mental well-being among the unemployed. The role of economic and psychosocial factors. *Sociology*, 33, 577–597.
- O'Campo, P., Molnar A., Ng E., Renahy E., Mitchella Ch., Shankardass K., John A. St., Bamba C., Muntaner C. (2015) Social welfare matters: A realist review of when, how, and why unemployment insurance impacts poverty and health. *Social Science & Medicine* 132, 88-94.
- Ochsen, C., & Welsch, H. (2006). Labor market institutions: Curse or blessing? University of Rostock, Institute of Economics. Working Paper No. 62.
- Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behavior*, 74(3): 264-282.

- Reeves, A., McKee, M., Gunnell, D., Chang, S.S., Basu, S., Barr, B., Stuckler, D. (2015). Economic shocks, resilience, and male suicides in the Great Recession: cross-national analysis of 20 EU countries. *European Journal of Public Health*, 25(3):404-9.
- Sen, A. (1999). *Development as freedom*. Oxford: Oxford University Press.
- Sen, A. (1979) *Equality of What? Tanner Lecture on Human Values* In: *Tanner Lectures*, Stanford University.
- Silla, I., Cuyper, N., Gracia, F., Peiró, J., & Witte, H. (2009). Job Insecurity and Well-Being: Moderation by Employability. *Journal of Happiness Studies* 10(6): 739-751.
- Sjöberg, O. (2010). Social insurance as a collective resource: unemployment benefits, job insecurity and subjective well-being in a comparative perspective. *Social Forces* 88(3):1281–304.
- Strandh, M. (2001) *State Intervention and Mental Well-Being Among the Unemployed*. *Journal of Social Policy*, 30, 57–80.
- Strandh, M. Nilsson, K, Nordlund, M., Hammarström, A. (2015). Do open youth unemployment and youth programs leave the same mental health scars?--Evidence from a Swedish 27-year cohort study. *BMC Public Health*, 20(15).
- Van Oorschot, W. & Chung, H. (2015). Feelings of dual-insecurity among European workers: A multi-level analysis. *European Journal of Industrial Relations*, 21(1): 23– 37.
- Van de Velde, S., Huijts, T., Bracke, P., & Bambra, C. (2013). Macro-level gender equality and depression in men and women in Europe. *Sociology of health & illness*, 35(5): 682-698.
- Vinokur, A.D. and Schul, Y. (1997). Mastery and inoculation against setbacks as active ingredients in the JOBS intervention for the unemployed. *Journal of Consulting and Clinical Psychology*, 65(5), 867-877.
- Voßemer, J., Gebel, M., Täht, K., Unt, M., Högberg, B., & Strandh, M. (2018). The effects of unemployment and insecure jobs on well-being and health: the moderating role of labor market policies. *Social Indicators Research*, 138(3): 1229-1257.
- Vulkan, P., Saloniemi, A., Svalund, J., & Väisänen, A. (2015) Job insecurity and mental well-being in Finland, Norway, and Sweden. *Consequences of flexicurity in a Nordic welfare setting*. *Nordic journal of working life studies* 5(2): 33-53.
- Wheaton, B., & Montazer, S. (2010). Stressors, stress, and distress. *A handbook for the study of mental health: Social contexts, theories, and systems*, 171-199.
- Wulfgramm, M. (2011) *Can Activating Labour Market Policy Offset the Detrimental Life Satisfaction Effect of Unemployment?* *Socio-Economic Review* 9(3): 477–501.
- Wulfgramm, M. (2014). Life satisfaction effects of unemployment in Europe. The moderating influence of labour market policy. *Journal of European Social Policy*, 24, 258–272.



This work has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 649496