



This is a repository copy of *Does job insecurity threaten who you are? Introducing a social identity perspective to explain well-being and performance consequences of job insecurity.*

White Rose Research Online URL for this paper:
<http://eprints.whiterose.ac.uk/109068/>

Version: Accepted Version

Article:

Selenko, E., Mäkikangas, A. and Stride, C.B. orcid.org/0000-0001-9960-2869 (2017) Does job insecurity threaten who you are? Introducing a social identity perspective to explain well-being and performance consequences of job insecurity. *Journal of Organizational Behavior*, 38 (6). pp. 856-875. ISSN 0894-3796

<https://doi.org/10.1002/job.2172>

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

Abstract

This paper introduces a social identity perspective to job insecurity research. Worrying about becoming jobless, we argue, is detrimental because it implies an anticipated membership of a negatively evaluated group – the group of unemployed people. Job insecurity hence threatens a person's social identity as an employed person. This in turn will affect well-being and job performance. A three-wave survey study among 377 British employees supports this perspective. Persons who felt higher levels of job insecurity were more likely to report a weaker social identity as an employed person. This effect was found to be stable over time, and also held against a test of reverse causality. Furthermore, social identity as an employed person influenced well-being and in-role job performance and mediated the effect of job insecurity on these two variables over time. Different to the expectations, social identity as an employed person and organisational proactivity were not connected. The findings deliver interesting evidence for the role of social identity as an employed person in the relationships between job insecurity and its consequences. Theoretically, this perspective illustrates the individual and group-related nature of job insecurity and offers a novel way of connecting work situations with individual well-being, behaviour, and attitudes.

Keywords: job insecurity, social identity, well-being, job performance, organisational proactivity

Does job insecurity threaten who you are? Introducing a social identity perspective to explain well-being and performance consequences of job insecurity.

“How large, in your opinion, is the probability that you will become unemployed in the near future?” (De Witte, 1999, p. 164). Pondering an answer to a question like this is not particularly pleasant. Perceived job insecurity is commonly defined as “...an overall concern about the future existence of the job” (Rosenblatt & Ruvio, 1996, p. 587) and presumed to be of growing concern to employees, given the stuttering economic recovery from the global financial crisis (International Labour Organisation, 2015). In work psychological research, job insecurity is typically regarded as a stressor, and it has been associated with a number of negative outcomes for individual well-being and both job and organisational behaviour (e.g., see Cheng & Chan, 2008; Gilboa, Shirom, Fried, & Cooper, 2008; Sverke, Hellgren, & Näswall, 2002 for meta-analytic findings). Consequences of job insecurity also span beyond the work context. It has been related to household saving behaviour (Benito, 2008), and even suggested as a trigger for voting for extremist right-wing parties (e.g., Billiet & De Witte, 1995; De Weerd, De Witte, Catellani, & Milesi, 2004). In the present paper we introduce a new theoretical perspective to account for the varied negative consequences of job insecurity. We argue that job insecurity, particularly the apprehension of becoming unemployed, threatens a person’s social identity as an employed person. By threatening this valued part of a person’s social identity, job insecurity would have the power to negatively influence well-being, behaviour and attitudes associated with that part of identity.

A variety of theoretical approaches have been previously proposed to explain job insecurity’s consequences. Job insecurity has been associated with a breach of psychological contract (e.g., De Cuyper & De Witte, 2006), a threat to valued resources (e.g., De Cuyper,

Mäkikangas, Kinnunen, Mauno, & De Witte, 2012; Selenko & Batinic, 2013; Vander Elst, Näswall, Bernhard-Oettel, De Witte, & Sverke, 2016; Vander Elst, Richter, Sverke, Näswall, De Cuyper, & De Witte, 2014), a dissatisfaction of fundamental human needs (e.g., Van den Broeck, Sulea, Vander Elst, Fischmann, Illescu & De Witte, 2014), and a loss of control (Vander Elst, De Cuyper, Bailien, Niesen, & De Witte, 2014; Vander Elst, Van den Broeck, De Cuyper, & De Witte, 2014) amongst many others. So far none of these approaches has included what we believe to be the core element of job insecurity: that is, the apprehension of becoming unemployed, of no longer being “one of the employed”, which implies a threat posed to a person’s identity as an employed person.

This paper introduces a new theoretical perspective to the understanding of job insecurity: the social identity perspective (Tajfel & Turner, 1986). Job insecurity, we argue, is stressful because it threatens one’s status as an employed person, which forms a substantial part of a person’s social identity. Social identity research has associated the threat to a preferred social category membership (which could be ‘employment’) to a host of detrimental outcomes (Tajfel & Turner, 1986; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). These outcomes include, amongst others, negative affect, reduced in-group loyalty, reduced commitment to group goals, and lower performance (e.g., Jetten, Branscombe, Spears, & McKimmie, 2003; Schmitt & Branscombe, 2001; Van Knippenberg, 2000). Furthermore, social identity research offers a wealth of knowledge on strategies to deal with threatened identity, such as denigrating ‘outgroups’, adjusting behaviour to group norms, leaving the ‘own group’, and the specific conditions under which these strategies take place (e.g., Ellemers, 1993). Therefore the social identity approach to job insecurity might be able to account for consequences of job insecurity that have been difficult to explain within existing theoretical models - such as organisational outcomes (for a discussion see, e.g., Probst, 2000; Selenko, Mäkikangas, Mauno, & Kinnunen, 2013; Staufenbiel & König, 2010) and perhaps

even outcomes that go beyond the organisational context, such as voting preferences (De Weerdt et al., 2004) or the willingness to join a labour union (e.g., De Witte, 2005; Sverke & Hellgren, 2001).

The research domain of this study is job insecurity, but the theoretical mechanism that is investigated can be applied to the explanation of other employment-related phenomena as well. In this study we suggest that job insecurity threatens a person's social identity as an employed person; 'being employed' is thereby understood as a social identity category in the sense of Tajfel and Turner (1986) and Turner et al. (1987). This theoretical idea might not only be suitable for explaining the consequences of job insecurity, but also the consequences of other forms of employment change, loss or threat could be explained by it. Social identity theory has been applied to the organisational context before (e.g., Ashforth & Mael, 1989; Hogg & Terry, 2000), but an individuals' employment status itself and changes in it have not been analysed from that perspective. The analysis of job insecurity from a social identity perspective could hence serve as a first contribution to a new research strand. In Sutton and Staw's (1995) sense, social identity theory could become a strong new theory for understanding the consequences of job insecurity and other situations where the employment situation is affected. This is important from an academic as well as practical point of view. With strong theoretical guidance, protective factors from the detrimental effects of job insecurity might be more readily identified.

Introducing a social identity perspective on employment and job insecurity

Employment and personal identity are very closely intertwined. When starting a conversation with a new acquaintance, one of the first questions people of a certain age get asked is "what do you do for a living?". In many social situations, one's own employment provides a handy way to define and position oneself in relation to others. Providing identity and societal status is also recognised as one of the core latent functions of work and

employment (e.g., Jahoda, 1982, 1997). Accordingly, if employment is threatened, an important part of a person's identity is being affected. This threat will have consequences for a person's well-being, but also the behaviour and attitudes associated with that part of their identity.

Seen from a social identity theory perspective, employment can be understood as a social group membership that forms part of a person's self-concept (Haslam, 2004; Turner et al., 1987). Social identity categories such as employment can function as systems of orientation to "...define the individual's place in society" (Tajfel & Turner, 1986, p. 15-16). People perceive reality in terms of social category memberships that enable them to make sense of their social environment and their position within it, and also guide their behaviour and evaluations (Ashforth & Mael, 1989). Simply said, "who one is" is defined by the social categories one feels part of. Striving for a positive social identity is assumed to be a fundamental goal of almost everyone, and to achieve that positive identity many people aspire to be part of positively evaluated social categories. To an individual, almost any group can function as a social category, as long as it enables a differentiation between "us vs them". In classic minimal group experiments Billig and Tajfel (1973) showed that even if groups were formed based upon the most superficial ad-hoc criteria, participants still showed more favourable attitudes and preferential behaviour towards their own group than towards the other group. Being employed is likely to mean more than just a minimal group membership, as it is attached with considerable emotional and psychological significance (Jahoda, 1982, 1997; Warr, 1987). It is very probable that employment can function as a social identity category, that allows a differentiation in 'us employed vs them unemployed'.

Certainly, the social identity as an employed person is only one out of several social identity categories that a person can have. For example, a person can simultaneously be employed, married, a member of a work team, a fan of a football team (and many more).

However, not all of these categories are equally relevant or salient to a person at the same time (Haslam, 2004; Turner et al., 1987). Depending on the context, one or other social identity category will become more salient. In this sense a person's social identity could be understood as a kind of vessel that is filled with different social category memberships at different times. We argue that, in a context where job insecurity plays a role, it will be the social identity as an employed person that becomes particularly salient and threatened.

Job insecurity makes a person's identity as employed salient, and threatens it

The process of identity salience can be triggered by a number of factors, such as a change in the group composition (e.g., Randel, 2002) - or the noticeable presence of an out-group (e.g., Ashforth & Mael, 1989). In everyday secure employment situations people will rarely reflect upon the fact that they are employed (as compared to unemployed persons); they just get on with their jobs. In this situation, their social identity as an employed person will not be salient to them and is unlikely to influence behaviour, attitudes or well-being. This situation is likely to change when employment becomes more insecure. In a situation of job insecurity, a person apprehends becoming unemployed. In other words, persons become aware of an unwanted social category or out-group (unemployment, the unemployed), which is in contrast to their own social group (employment). In this situation, a person's social identity as an employed person will become more salient. According to Haslam (2004, p. 23) "people think in terms of their group membership when the context in which they find themselves is defined along group-based lines". In a context where job insecurity prevails, the defining group-based line would be the border between still having a job and not having a job anymore. In this setting, people's identity as employed persons would become salient and relevant for attitudes and behaviour. Job insecurity might also trigger awareness of other layers of identity. However, since job insecurity entails the apprehension of unemployment as

a core element, the employment status is the identity most likely to become salient in contrast.

Aside from making the identity as an employed person more salient, job insecurity is also likely to threaten this identity. After all, the future existence of one's employment status is uncertain. When evaluating their status within a given group, people compare themselves to a prototypical group member, who can be seen as a representative for a certain group (Turner et al., 1987). To the degree that they diverge from this prototypically, they would perceive themselves as less belonging to a certain social group and threatened in that part of their identity (Haslam, 2004). Worrying about the future of ones' job is not considered a prototypical element of being employed on a permanent contract (De Cuyper & De Witte, 2006). Job insecure workers might perceive their employment as being less prototypical than that of a typical employed person and hence feel threatened in their identity as employed people. Stated in less technical terms: if a job is part of who one is, then job insecurity will threaten that part of the self.

To summarise, there is enough theoretical and empirical reason to expect that job insecurity is going to (1) make people become more aware that they are employed; (2) at the same time, make them realise that their own employment situation is not prototypical and safe; and thereby (3) threaten their identity as employed persons. This is not without consequences.

Consequences for well-being, work-related behaviour, and attitudes

Job insecurity is regarded as a stressor, signified by a subjectively perceived threat to the future existence of ones' job and the important aspects associated with having a job (e.g., Sverke, De Witte, Näswall, & Hellgren, 2010, p. 175). This in turn has been associated with a host of negative outcomes for the individual (see Cheng & Chan, 2008; Gilboa et al, 2008; Sverke et al., 2002).

Threats to the self and social identity have also been connected with serious effects for well-being (Haslam, Jetten, Postmes, & Haslam, 2009). People who feared that they could not maintain a valued group membership were found to have worse health outcomes (Haslam et al., 2009). This is not particularly surprising, as appraising a situation as a threat to the self is also a crucial element in the primary stress appraisal process (Lazarus & Folkman, 1984), making a relationship between threats to social identity and well-being probable.

Furthermore, feeling less identified with the majority employed population is likely to lead to generally heightened feelings of social exclusion and reduced belongingness. Reduced belongingness has been directly related to reduced immune functions, increased stress, and even a heightened risk of suicide (e.g., Baumeister & Leary, 1995).

Effects on well-being have only recently been of interest in social identity research (e.g., Haslam & Van Dick, 2011; Van Dick & Haslam, 2012), which has traditionally concerned itself with attitudinal and behavioural outcomes. For example, Jetten et al. (2003) argued that being peripheral in a group (as more job insecure persons would be in the group of employed persons, where being securely employed is the prototype) - and feeling less identified with that group - leads to less in-group loyalty. In a series of laboratory experiments Jetten et al. (2003) and Schmitt and Branscombe (2001) demonstrated that people who were peripheral or felt threatened in their prototypicality to a group were less likely to expend effort for that group. Similarly we might expect, if people experience job insecurity and hence feel threatened in their social identity as members of the group of employed persons, they would be less inclined to show behaviour that is in line with the interests and norms of that group.

One value that is prototypical to employment is 'working hard' (Furnham, 1984). In this sense, if people have a weaker identity as an employed person, they might also subscribe

less to the value of 'hard work'. Consequently, core job duties might suffer and job performance might go down due to a threatened identification with the employed group.

In his review of existing empirical evidence connecting social identity, task and contextual performance, Van Knippenberg (2000) argued that contextual performance (like organisational proactivity) would be generally more affected by social identity, as it is more under the discretion of the individual and falls beyond must-do standards. Persons who have a weaker social identity as an employed person would hence be less likely to show organisational member proactivity (e.g., Griffin, Neal, & Parker, 2007), which entails future-directed behaviour aimed to increase the organisations effectiveness. We might even go a step further and hypothesize that persons who feel less attached to the group of employed might be less inclined to expend effort on behalf of the interests of employed people in general, e.g., they might be less likely to become an active union member, to vote for inclusive employment policies, etc. These additional outcomes are not, however, the focus of this paper.

Although job insecurity and a person's social identity as an employed person have not been connected previously, it needs to be acknowledged that job insecurity has been related to the affiliated subgroup identity as an organisational member before (e.g., Buitendach & De Witte, 2005; Feather & Rauter, 2004; Van Dick, Ullrich, & Tissington, 2006). For example, Van Dick et al. (2006) investigated job insecurity and organisational identity as two separate factors that independently influence post-merger satisfaction of employees. This is slightly different to our argument, which is that job insecurity and social identity (as an employed person) are two connected processes, the one informing the other. This connected-processes argument finds some, albeit mixed support in the organisational identity literature. Feather and Rauter (2004), for example, did not find a significant difference between permanently and temporarily employed teachers in their organisational identity; whilst other studies that

measured perceived job insecurity did find such a relationship (e.g., Buitendach & De Witte, 2005). However neither of these studies paid attention to the social identity as an employed person as a possible mechanism.

Theoretical support for the argument that increased job insecurity leads to a weaker identity as an employed person can be found in neighbouring work psychological streams outside the social identity literature. In his original work on effort-reward-imbalance, Siegrist (1996) introduced the idea of “occupational status control”. Without explicitly referring to social identity theory, Siegrist saw employment as having an important status providing function. Accordingly, job insecurity would imply a loss of control over, and threat to one’s occupational status. While the loss of control has been found to be an important mediator of the deleterious effect of increased job insecurity on well-being and organisational commitment (e.g., Vander Elst, De Cuyper et al., 2014), Siegrist’s (1996) concept of occupational status threat has not yet been picked up on in job insecurity research.

Introducing a new theoretical framework to an extensively researched field such as job insecurity is not without challenges. Still, most theoretical approaches overlook an important element: that employment statuses could be understood as defining a social group. Social identity theory provides this as its core element – according to this approach, an individual’s behaviour, attitudes, and expectations are guided by group norms, their position in a certain group, and the group’s status. Social identity theory differs from most other theories by proposing a fundamentally different way of thinking about the person. Through this prism, individual behaviour, attitudes and expectations are inherently influenced by social comparisons and self-categorisations. By relating job insecurity to social identity, its group-related, social character becomes clear. Job insecurity is an individual perception, but it evokes certain social category memberships (i.e. ‘being employed’) and will have consequences for behaviour and attitudes that are related to this social category.

As such, the proposed perspective can complement and expand existing explanations of job insecurity, such as stress theories or psychological contract theory. Originally conceptualised from a social exchange point of view (see Rousseau & McLean Parks, 1993), psychological contract violation can also be explained with the help of social identity theory. An organisation can function as a social identity-relevant category for an employee, upon which expectations are based and from which rules for behaviour are derived. Organisational behaviour that violates these expectations hence also threatens the self (see for similar reasoning Thompson & Bunderson, 2003; and in the area of justice, Skitka, 2003). Whereas psychological contract theory focuses on job insecurity from an organisational level perspective, the present study explains job insecurity from an employment level perspective.

In line with social identity theory's principles of group membership salience and threat, we assume that job insecurity will make persons more aware of their social identity as employed people, and at the same time threaten this identity. People who perceive more job insecurity are likely to feel less prototypical in their employment situation, and aware that they might be about to lose this group membership. This leads to a weaker identity as an employed person. Therefore, our first hypothesis is:

Hypothesis 1: People who experience more job insecurity will have a weaker social identity (as an employed person), than people who experience less job insecurity.

Furthermore, we propose that the less people define themselves as a member of the employed group, the lower their well-being and performance (i.e. in-role job performance and organisational proactivity) is likely to be. The relationship between job insecurity and those outcomes will be explained by the degree of social identification with the employed population. Consequently, we propose the following hypotheses which are illustrated in Figure 1:

Hypothesis 2: People who report a weaker social identity (as an employed person) will have lower well-being and lower performance than people with a stronger social identity (as an employed person).

Hypothesis 3: Social identity (as an employed person) will mediate the relationships between job insecurity and both well-being and performance; that is, negative indirect effects will exist between job insecurity and both well-being and performance, operating through social identity.

Method

Sample

To test these hypotheses, levels of job insecurity, social identity as member of the employed population, well-being, and job performance were collected from a sample of British employed workers ($n = 377$) on three occasions in 2014. Respondents were recruited through a survey panel company, and were required to be employed at the start of the study.

Participation in this survey was completely voluntarily, anonymous, and confidential.

Respondents could withdraw at any point; however, to encourage response, upon completion of each survey participants were rewarded with token points that could, over the long run, be exchanged against certain goods. The study gained ethical approval by the first and third author's organisation.

Wave 1 of the survey (subsequently called T1) took place in June 2014. The 377 respondents who participated in this wave were subsequently invited to participate at wave 2 (T2: two months later, at which $n = 287$ responded), and wave 3 (T3: four months after the initial data collection, $n = 254$). Given that 2014 was a turbulent year for the UK economy, it was estimated that a two month gap between waves would be long enough to capture potential changes in the variables under study without losing too many respondents.

The 377 respondents who participated at least once over the three waves had an average age of 44.62 years ($SD = 10.93$ years); 60.6 % were male; over half (69.8%) were in a relationship; and just under a third (30.8%) had at least one child aged under 16 living at home with them. A small minority (2.8%) had not finished any schooling; otherwise, the highest educational qualification of 24.9% was GCSE completion (secondary schooling); for 20.1% it was A-level completion (schooling up to age 18); for 16.4%, a technical or professional qualification; for 23.4% a bachelor or masters' degree; and 12.9% possessed a postgraduate degree. Just over half of the respondents (55.9%) worked in so-called 'blue collar' occupations (comprising of clerks, service workers or sales workers, craft or related trades worker, persons working in elementary occupations, plant or machine operators or assemblers, and skilled agricultural or fishery workers), whilst the remainder worked in so-called white collar occupations (comprising of legislators, senior officials, managers, people in professional occupations, or associate professional/ technical occupations). Almost three-quarters of respondents (72.6%) were on a permanent contract with their current employer at T1. To test for systematic drop out between the waves, two binary logistic regression analyses were conducted, using variable means of job insecurity, social identity as employed person, well-being, proactivity, in-role job performance at T1 and the demographic variables (gender, age, relationship status, number of children, contract, and job type) to predict participation rates at T2 and T3. The results showed that collectively the study variables collected at T1 were not related to participation rates at T2, $\chi^2(16) = 22.22, p > .05$, or T3, $\chi^2(16) = 26.15, p > .05$.

Measures

Job insecurity was measured with De Witte's four item job insecurity scale (De Witte, 2000; Vander Elst, De Witte, & De Cuyper, 2014). Respondents had to indicate their agreement to each of four items (e.g., "Chances are I will soon lose my job") on a 5-point

response coding from 1 to 5, where higher values indicated higher job insecurity. The scale displayed good internal consistency reliability, as measured by Cronbach's alpha statistic; at T1, $\alpha = .88$, T2, $\alpha = .89$, and T3, $\alpha = .88$.

Social Identity as Employed Person was assessed with Doosje, Ellemers, and Spears' (1995) four item social identity scale, as described by Haslam (2004, p. 273). This scale has been widely used across a variety of contexts (also organisational settings) to assess social identification as well as social identity (see Haslam, 2004). For the purpose of this study, the group reference in the scale's items was the "working population", which is a more commonly understood category than "the group of the employed persons". Respondents had to indicate on a 7-point response coding from 1 to 7 how strongly they disagreed or agreed with each of the following four statements: "I see myself as a part of the working population", "I am pleased to be a part of the working population", "I feel strong ties with the working population", and "I identify with others who are part of the working population". This scale again displayed high internal consistency, with $0.91 < \alpha < 0.92$ across the three waves.

Well-being was measured with the General Health Questionnaire (GHQ-12; Goldberg & Hillier, 1976). This classic 12-item instrument captures context-free well-being, with higher scores indicating lower levels of well-being, or in other words, higher levels of strain. Respondents had to indicate on a 4-point scale from 0 to 3 how frequently they have recently, that is over the past few weeks, e.g., "been able to concentrate on whatever they are doing", or "felt they could not overcome difficulties." This scale has been extremely widely used to measure well-being, with many applications in working populations (see Werneke, Goldberg, Yalcin, & Üstün, 2000; Stride, Wall & Catley, 2007), and showed high internal consistency reliability in this study ($0.90 < \alpha < 0.92$ across the three waves).

Organisational Proactivity was assessed by the Griffin et al. (2007) organizational member proactivity scale. Respondents had to indicate how frequently they engaged in certain behaviours aimed at increasing their organisation's effectiveness (rather than individual or work team effectiveness) over the last week. For example, respondents had to estimate how often they "Made suggestions to improve the overall effectiveness of the organisation (e.g., by suggesting changes to administrative procedures)". Their answers on a 5-point response coding could range between 1 "much less than usual" to 5 "much more than usual". This three item scale showed high internal consistency reliability at T1 ($\alpha = .88$), T2 ($\alpha = .90$), and T3 ($\alpha = .88$).

In-role job performance was measured using the individual task proficiency scale devised by Griffin et al. (2007). Respondents were instructed to think about their behaviour at work in the last week, and then indicate how frequently they engaged in certain activities, in comparison to their usual standard. For example, respondents had to estimate how frequently they "Carried out the core parts of [their] job well". The response options/coding was the same as for the organisational proactivity measure. Self-reports of job performance are widely used in job insecurity studies (e.g., Gilboa et al., 2008; Schreurs, Van Emmerik, Günter, & Germeys, 2012) and this measure proved to be highly reliable in this study ($0.94 < \alpha < 0.96$ across the three waves).

Control Variables

Previous studies on job insecurity have ignored social identity, but a wealth of knowledge exists on the influences of job insecurity and its consequences. Job insecurity effects have been found and been argued to vary by gender (Mauno & Kinnunen, 2002), age (Cheng & Chan, 2008), education, whether one is in a blue or white collar profession (Sverke et al., 2002) and the whether one has a fixed term or permanent contract (De Cuyper & De

Witte, 2006). Also family support, often measured in terms of relationship status or having children (Lim, 1996) can be of influence.

Table 1 presents correlation coefficients indicating the relationships between these potentially confounding variables and the variables of primary interest in this study, i.e. job insecurity, social identity, well-being (strain), and job performance. As can be seen, age and relationship status shared non-trivial correlations with job insecurity and some of the outcome variables; contract type correlated with job insecurity and social identity as an employed person. This indicates that these three demographic variables might confound the hypothesized direct and/or indirect relationships. Consequently, age, relationship status and contract type were included in the subsequent analyses as controls.

Analysis strategy

The statistical analyses was performed in three distinct stages: (1) a test of the measurement model for the constructs in our model, and its invariance across time, (2) a test of the hypothesised relationships and (3) an investigation of potential ‘reverse causality’ between our predictor (job security) and mediator (social identity).

In the first phase of the analysis, the overall fit, discriminant validity, and temporal measurement invariance of the hypothesised four factor measurement model for job insecurity, social identity, organisational proactivity, and in-role job performance were established. In this model all job insecurity items, social identity items, job role performance items and organisational proactivity items (14 in total) were allowed to load on their respective constructs at each of the three waves, which resulted in 12 factors (i.e. four at each wave). Item residuals were allowed to correlate with those of the equivalent item at subsequent and/or previous waves. All factors were free to correlate with each other. Our well-being (strain) measure (GHQ) was excluded from this stage of the analyses due to the combination of its large number of items and our moderate sample size - treating well-being

as a latent variable (i.e. including the 12 item GHQ scale as factor indicators at each wave) would have dramatically increased the number of model parameters to be estimated. However the adequacy of the GHQ's psychometric properties are supported by the vast repository of studies that have used the GHQ scale and demonstrated its validity and reliability.

We initially tested whether the hypothesised four factor measurement model provided an adequate fit at each wave simultaneously, and whether it was significantly better than both a potential competing three factor model (where organisational proactivity and task performance items loaded on the same factor) and one factor model. We then examined whether the hypothesised four factor measurement demonstrated the critical property of measurement invariance across time by comparing the initial model (the configural invariance model, in which only the item-four factor arrangement is held constant across T1 to T3) against a sequence of three alternative simpler models with increasing degrees of invariance. These alternative models were, in order of testing and theoretical importance, a metric invariance model (item-factor loadings fixed equal across T1 to T3), a strong invariance model (loadings and intercepts fixed equal across T1 to T3); a strict invariance model (loadings, intercepts and item residual variances fixed equal across T1 to T3) and full invariance (loadings, intercepts, item residual variances, and correlations between item residuals at adjacent waves, i.e. T1 with T2 and T2 with T3, fixed equal). Without at least strong invariance, any changes in or relationships between our factors across time are potentially confounded by variation in the interpretation of the items measuring them across time: that is, the scale and zero point of the measures are not consistent.

Finally, taking the best model from this sequence, we calculated Average Variance Extracted (AVE) scores for each factor and used these to assess internal convergent and external discriminant validity at each wave (Fornell & Larcker, 1981).

The second phase of the analysis tested the hypothesized mediation model that encompasses H1, H2 and H3, and its stability over time. This was achieved by extending our best fitting measurement model to a cross-lagged structural equation model. Specifically we added: the observed mean (composite) GHQ score as an additional outcome at each wave; our three control variables as correlates of job insecurity factors and antecedents of social identity and each outcome; autoregressive paths between the same measures at different waves; and then cross-lagged paths corresponding to our hypothesised relationships. The cross-lagged paths were from job insecurity at T1 and T2 to social identity at T2 and T3 respectively; and from social identity at T1 and T2 to each of the outcome variables at T2 and T3 respectively (see Figure 1 for the final model diagram). Direct paths from job insecurity at T1 to each outcome variable at T3 were also added. The invariance over time of each pair of cross-lagged paths was then tested in turn, to check that the equivalent paths between constructs from T1 to T2, and from T2 to T3 were stable. Taking the best model from this sequence, the estimated path coefficients from job insecurity to social identity, and from social identity to each outcome were used as tests of hypotheses 1 and 2 respectively. Indirect effects from job insecurity via social identity to each outcome were estimated by calculating the product of path coefficients, and their bootstrapped 95% confidence intervals calculated, as a test of hypothesis 3 (Hayes, 2013).

The third and final phase of the analysis concentrated on demonstrating that the hypothesised direction of the proposed job insecurity – social identity relationship offered a superior fit to a model in which this direction was reversed. It could be argued that feeling less part of the employed population might make a person worry more about their job security. This alternative model would posit social identity as an antecedent variable and job insecurity as a mediator. To test this reversal, causal paths were added to the hypothesized

model that was developed in the second phase of the analysis, i.e. such that social identity also served as an independent variable and job insecurity as the mediator.

We limit the reverse causality test to the relationship between job insecurity and social identity. The causal relationship between job insecurity and each of the outcome variables has been confirmed in numerous previous studies and was not of interest here (e.g., Kinnunen, Mäkikangas, Mauno, De Cuyper, & De Witte, 2014; Kinnunen, Mauno, Nätti, & Happonen, 2000), and so has the relationship between social identity and those variables (e.g., Haslam et al., 2009; Van Knippenberg, 2000). In addition, there is no plausible theoretical or empirical reason to presume why certain states of well-being or degrees of performance would affect a person's social identity as an employed person.

In the reverse causality model, the possible impact of social identity for job insecurity was tested. In this model well-being and performance still served as outcome variables. First the stability across time of this reversed causal relationship (i.e. social identity to job security) was tested. The size of the reversed causal relationship was then fixed equal to that in the original direction (i.e. the hypothesised job insecurity – social identity path), with this model compared to the model in which they differed to offer a test of potential reverse causality: if this latter fixing weakened the model fit, this would imply that the original and reversed relationships differed in strength, and hence suggest that one was stronger (and hence more supported) than the other.

All analyses were performed using Mplus 7.4 statistical software (Muthén & Muthén, 1998-2012). The models were fitted using full information maximum likelihood estimation with robust standard errors and scale-corrected chi-square test value (MLR estimator; Muthén & Muthén, 1998–2012) which can account for naturally occurring non-normality of study variables and allowed us to use observations in the dataset to estimate the parameters in the models as opposed to performing listwise deletion. The goodness-of-fit of each model was

evaluated using a combination of both absolute and incremental fit indices as recommended by Hu and Bentler (1999), specifically; (a) the Root Mean Square Error of Approximation (RMSEA; Steiger, 1990); (b) the Comparative Fit Index (CFI; Bentler, 1990); (c) the Tucker-Lewis index (TLI; Tucker & Lewis, 1973); and (d) the Standardized Root Mean Square Residual (SRMR; Hu & Bentler, 1999). Competing models were compared using the Satorra-Bentler scaled difference chi-square test (Bollen, 1989; Satorra & Bentler, 2001), with the more parsimonious model preferred where no difference was found. Where significance tests were performed between models or on parameters, the $p < 0.05$ level of statistical significance was used. 95% confidence intervals are provided throughout where appropriate: in particular, bootstrapped confidence intervals with 10,000 resamples were used for ascertaining whether non-zero indirect effects existed (Hayes, 2013),

Results

Establishing measurement and time invariance

The 'four factors at each wave' measurement model (configural invariance) was a satisfactory fit to the data ($\chi^2 = 1138$, $df = 711$, $CFI = 0.95$, $TLI = 0.94$, $RMSEA = 0.04$, $SRMR = 0.05$) under the fit index cut-off criteria suggested by Hu and Bentler (1999), i.e. $CFI \geq 0.95$, $TLI \geq 0.9$, $RMSEA \leq 0.06$, $SRMR \leq 0.08$. It also significantly outperformed both a competing three factor model ($\chi^2 = 2024$, $df = 741$, Satorra-Bentler adjusted $\Delta\chi^2 = 650$, $\Delta df = 30$, $p < 0.05$, $CFI = 0.844$, $TLI = 0.819$, $RMSEA = 0.068$, $SRMR = 0.081$) and one factor model ($\chi^2 = 6197$, $df = 794$, Satorra-Bentler adjusted $\Delta\chi^2 = 2983$, $\Delta df = 83$, $p < 0.05$, $CFI = 0.345$, $TLI = 0.289$, $RMSEA = 0.134$, $SRMR = 0.245$). Furthermore the four factor model displayed full measurement invariance across time, with model fit not being reduced by the fixing of factor loadings equal across waves (Satorra-Bentler adjusted $\Delta\chi^2 = 15$, $\Delta df = 20$, $p > 0.05$), nor by similarly fixing the intercepts (Satorra-Bentler adjusted

$\Delta\chi^2 = 13$, $\Delta df = 20$, $p > 0.05$), nor by similarly fixing the item residuals (Satorra-Bentler adjusted $\Delta\chi^2 = 23$, $\Delta df = 28$, $p > 0.05$), nor even by fixing the correlations of residual variance between adjacent waves equal across the T1-T2 and T2-T3 (Satorra-Bentler adjusted $\Delta\chi^2 = 19$, $\Delta df = 14$, $p > 0.05$). Full details of these model comparisons are given in Table 2.

The factors within the full invariance model all demonstrated both internal convergent validity (AVE scores all > 0.5) and discriminant validity (at each wave, every factor's AVE score exceeded the squared correlation of that factor with any other factor, and also with the observed composite mean GHQ score for well-being). AVE scores and inter-factor correlations, as well as correlations between factors, the mean GHQ scores, and the control variables, are given in Table 1¹.

Testing the hypothesized relationships: Does job insecurity lead to less well-being and performance through reduced social identity as employed person?

Our hypotheses stated that people who experience more job insecurity would report a weaker social identity as employed people (H1); that social identity as an employed person would be positively related to well-being and performance (H2); and that social identity as an employed person would mediate the relationship between job insecurity and well-being and performance (H3). Adapting the full invariance version of the measurement model to test our hypotheses by adding control variables, the observed well-being (GHQ) outcome, and the hypothesised causal paths produced a satisfactorily fitting model ($\chi^2 = 1735$, $df = 1052$, $CFI = 0.923$, $TLI = 0.919$, $RMSEA = 0.042$, $SRMR = 0.085$), which was not compromised by in turn fixing autoregressive paths equal across time (Satorra-Bentler adjusted $\Delta\chi^2 = 11$, $\Delta df = 5$, $p > 0.05$); nor by fixing the cross-lagged predictor to mediator (i.e. job insecurity to social identity) paths equal across time (Satorra-Bentler adjusted $\Delta\chi^2 = 1$, $\Delta df = 1$, $p > 0.05$); nor by

¹ A correlation matrix based on the observed variables is available from the first author upon request.

fixing the cross-lagged mediator to outcome (i.e. social identity to each performance measure and to well-being) paths equal across time (Satorra-Bentler adjusted $\Delta\chi^2 = 1$, $\Delta df = 3$, $p > 0.05$). Table 3 details these comparisons and Figure 2 displays the final model, with unstandardized path estimates and 95% confidence intervals added to the structural paths.

These latter two results supported the stability and generalizability across time of the relationships between predictor to mediator, and mediator to outcome, i.e. our hypothesised effects from H1 and H2, which were then examined. The path from predictor (job insecurity) to mediator (social identity) was negative and statistically significant ($B = -0.093$, $p < 0.05$), supporting hypothesis 1. Of the paths from social identity to each outcome, those to well-being (i.e. strain) and in-role job performance were statistically significant ($B = -0.045$, $p < 0.05$; $B = 0.077$, $p < 0.05$ respectively), but that to organisational proactivity was not ($B = -0.009$, $p > 0.05$). None of the control variables (age, relationship status and contract type) correlated significantly with any of the latent variables in our model.

There were also non-zero indirect effects of job insecurity at T1, via social identity at T2, on both strain and in-role job performance at T3 ($B = .004$, bootstrapped 95% CI = .001/.013, and $B = -.007$, bootstrapped 95% CI = -.020/-.002 respectively). However, largely due to the weak relationship between social identity and organisational proactivity, there was not sufficient evidence to suggest that the indirect effect of job insecurity on organisational proactivity via social identity ($B = 0.001$, bootstrapped 95% CI = -0.004/0.008) was non-zero. We hence regard hypothesis 3 as partially supported.

Investigating the direction of the job insecurity and social identity relationship

To test the hypothesized direction of effects against an alternative in which social identity was the antecedent and job insecurity the mediator, a further sequence of SEMs was constructed, taking our initial SEM and adding paths from social identity at a prior wave to

job insecurity at a later wave ($\chi^2 = 1695$, $df = 1041$, $CFI = 0.927$, $TLI = 0.921$, $RMSEA = 0.041$, $SRMR = 0.080$). As before, equivalent sets of paths were fixed equal over time; none of these constraints significantly reduced model fit (see Table 4 for full details). In the model in which our hypothesised paths were fully constrained across time ($\chi^2 = 1712$, $df = 1054$, $CFI = 0.927$, $TLI = 0.922$, $RMSEA = 0.041$, $SRMR = 0.083$), the path from social identity to job insecurity was not statistically significant ($B = -0.022$, $p > 0.05$), however, as before, the path from job insecurity to social identity was ($B = -0.096$, $p < 0.05$). To investigate the direction of causality we added a further constraint, with the social identity to job insecurity paths fixed equal to the original job insecurity to social identity paths. This resulted in a weaker fitting model ($\chi^2 = 1747$, $df = 1058$, Satorra-Bentler adjusted $\Delta\chi^2 = 40$, $\Delta df = 4$, $p < 0.05$, $CFI = 0.923$, $TLI = 0.918$, $RMSEA = 0.042$, $SRMR = 0.088$). Hence we would conclude that the social identity to job insecurity effect differs from the job insecurity to social identity effect, and, since the job insecurity to social identity path is stronger and statistically significant, that there is more evidence for the effect operating in this direction.

In summary, the hypothesized relationships are supported by our results and are remain stable over time. An alternative explanation for the relationship between job insecurity and social identity as an employed person gathers much less support.

Discussion

The aim of the present manuscript was to introduce and provide evidence for a social identity perspective on job insecurity. By adopting predictions based on social identity and self-categorisation theory (Ashforth & Mael, 1989; Haslam, 2004; Tajfel & Turner, 1986; Turner et al., 1987) we propose that job insecurity threatens a person's social identity as an employed person. Job insecure workers face losing their membership of being part of the employed workforce and fear becoming unemployed. There is some research evidence that illustrates how a threat to a valued identity can lead to reduced well-being, less commitment

to the group, and less willingness to put forward energy for the group (Haslam, 2004; Jetten et al., 2003; Schmitt & Branscombe, 2001). In this regard, a threat to one's identity as an employed person might account for the effect of job insecurity on well-being, job performance, and other outcomes, an effect for which it has previously been found difficult to provide an explanation within a common theoretical framework (for reviews, see Cheng & Chan, 2008; Gilboa et al., 2008, Sverke et al. 2002).

The empirical study in this paper provides substantial support for this perspective. For the first time it is shown that increased perceptions of job insecurity are likely to lead people to identify less with the employed population. People who perceived their job as more insecure were also more likely to feel less "belonging" to the employed working society; they defined themselves less as employed people. This reflects an impression often anecdotally reported by job insecure workers, of already being "at the margins" or pushed out of employment. It also provides evidence that job insecurity induces a loss of occupational status control, an idea previously proposed by Siegrist (1996). This job security to social identity relationship was stable over time and also more supported by the data than a reversed relationship (i.e. from social identity to job insecurity). Overall these findings offer substantial evidence for the existence, direction and temporal stability of a job insecurity to social identity relationship.

Furthermore we can show that this reduced identification with the group of employed people has deleterious effects on well-being and job performance at a later point in time, as per our hypothesis 2. This is in line with the proposition that "social identities [...] are central to health and well-being" (Haslam et al., 2009, p. 3) and with the findings of previous studies, which report a relationship between a threat to one's organisational identity and a person's well-being, job satisfaction and extra role behaviour (e.g., Buitendach & De Witte, 2005; Van Dick, et al., 2006). The effects on general well-being are to be expected, as threats to valued

identities, as “being employed” would be, have been found to have negative effects in themselves and also to aggravate negative symptoms of diseases (e.g., Baumeister & Leary, 1995; Haslam et al. 2009).

Beyond that, people who reported a weaker social identity as an employed person were also more likely to indicate that they fulfilled their job role duties less well. As marginalised members of a valued group (i.e. as the result of feeling less strongly identified with the employed population), people might have adopted different standards for fulfilling their job (Ellemers & Jetten, 2013). For example, they might feel less inclined to pull their weight for their group beyond what is expected of them.

There was also evidence of significant indirect effects of job insecurity via social identity on two outcomes, specifically well-being and in-role job performance, supporting hypotheses 3. Moreover, the cross-lagged relationships between job insecurity and social identity and between social identity as an employed person and these two outcome variables were time invariant, which supports the temporal stability of the indirect effect. In other words, we not only have strong support for the existence of the indirect effect in the present study, but also that effects of similar size and shape would be found in further waves of data collection.

Contrary to what was expected, social identity was not related to organisational proactivity at a later wave. This unexpected finding seems to undermine the assumption that social identity would be more relevant for extra-role performance rather than in-role performance. Apparently, behaviour aimed at organisational well-being, which has been related to organisational identification (e.g., Van Dick et al., 2006) was not related to the social identity as employed person. Could it be that organisational identification and identification as an employed person are less strongly related than initially assumed? Without

having assessed organisational identity in the present study, this conclusion remains a subject for future research.

Future outlook and limitations

We believe that including an individual's social identity as an employed person into the prediction of outcomes of job insecurity provides two major additions to job insecurity research. First, it offers a theoretical framework that can account for the effect of job insecurity upon well-being as well as on performance related outcomes. Up until now, theoretical models applied to the field of job insecurity struggled with the diversity of consequences associated with job insecurity. By introducing identity threat to this field, the paths to various behavioural consequences can be theorised. Perhaps in the future, even outcomes that span beyond the work context, such as e.g. voting behaviors could be explained by the proposed identity threat mechanism. More research would be needed to justify this speculation. Secondly, by adopting a social identity perspective new avenues of research are opened up. For example, according to research by social identity scholars, employees' reactions to job insecurity would not only depend on how *permeable* the person sees the boundaries between being unemployed and still being employed, but also on how *stable* they see their job insecurity status (see Ellemers, Wilke, & Van Knippenberg, 1993 for further details).

Furthermore, findings from experimental social identity research offer a breath of knowledge on the conditions of identity salience, threat and management and its consequences, which might be interesting to apply to other work psychological questions. For example, the mechanism of "group context salience" might help in explaining fluctuating individual behaviour in a social context (Turner et al, 1987). Self-categorisation theory acknowledges that an individual's employment situation (or any group membership for that matter) is of fluctuating importance and influence, depending on the context that the

individual is currently aware of. In the present study, we offer strong theoretical and empirical arguments making the case that job insecurity increases the salience of an individual's employment status. Certainly, this is not to preclude that there might also be other contextual influences that can enhance the salience of employment status (e.g., becoming retired or entering the first job); just as well as job insecurity might enhance the salience of other layers of identity, alongside the employment status. For example, concern about the future existence of important job features (the hallmarks of qualitative job insecurity, Hellgren, Sverke & Isaksson, 1999) might rather be related to a threat to occupational identity than to the social identity as an employed person. Future research might want to include different layers of social identities that are relevant at the work place and the conditions for them to become salient, in order to explore these issues further. Eventually, the present study might also be of interest to social identity researchers: a context of uncertainty is generally regarded to evoke (identity-bound) attitudes and norms for behaviour (Hogg, 2000), which makes job insecurity situations an ideal context to study processes of identity threat.

Finally, there are also some practical lessons to be learned. Given that social identity plays a role as a mediator in the job insecurity to outcomes relationship, counter-balancing any threat to feelings of belongingness to the employed population could offer a panacea for the negative effects of job insecurity. Various measures, ranging from volunteer work, sport activities, technological measures have been suggested as ways to enhance social belongingness and inclusion (Musick & Wilson, 2003; Van Winden, 2001). If they can enhance social identity as an employed person in times of job insecurity as well, then these activities might be valuable interventions.

This study does not come without limitations. For one, this is the first study arguing for job insecurity consisting of a threat to the social identity as an employed person. We

thereby equated job insecurity with the apprehension of becoming unemployed. While a standard element in the conceptualisation of job insecurity (e.g., De Witte, 1999; Van der Elst et al., 2016), measures of job insecurity mostly include items about the fear of job loss (e.g., Van der Elst et al., 2014). The fear of job loss however, might not automatically entail the apprehension of unemployment. For example, people who are highly employable, might not consider the group of unemployed people as a potential future group of their own. In this case, job insecurity might trigger other elements of their social identity, e.g. their identity as an organisational member. Including employability as a moderator, along with other forms of social identity, would be valuable in future research and might potentially strengthen the effects that were found in this study.

Secondly, the inherent correlational nature of our study design limits the causality conclusions that can be drawn. An experimental study design that systematically manipulates the salience and strength of the identification as an employed person might shed more light on its relationship with health and job outcomes; although it would bring reduced ecological validity. At present, the proposed causal directions compares favourably against alternative longitudinal relationships, where the path from social identity to job insecurity was found not to be significant. To further strengthen these findings, replication studies in different populations are needed. In this regard, future studies might also aim for more representative samples, e.g. by choosing a representative selection of occupations and educational backgrounds, to ensure that the discovered relationships can be tested between and, if consistent, generalised to a wider population of employees with varying human capital. Also, a consideration of more objective measures of performance that go beyond self-report measures might be worthwhile. Finally, to clarify the benefit of a social identity mechanism over alternative explanations, testing it against competing perspectives (e.g., social exchange, control) when explaining well-being, work-related behaviours and behaviours outside the

work context would be helpful. The social identity explanation suggested here might be particularly valid for behaviours that are typical for the social identity category of ‘being employed’ – such as e.g. ‘working hard’. This might also explain why the relationship between social identity as an employed person and organisational proactivity was less strong than anticipated.

Weighting the limitations against the potential theoretical perspective gain we hope that this study will be seen as a first step towards a prolific future theoretical unification of social identity theory with research on job insecurity and employment situations. Only by continuously challenging present theoretical perspectives on social phenomena can a better understanding of social reality be gained.

References

- Ashforth, B. E., & Mael, F. (1989). Social identity and the organization. *The Academy of Management Review*, *14*, 20–39.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497–529.
- Benito, A. (2008). Does job insecurity affect household consumption? *Oxford Economic Papers*, *58*, 157–181.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, *107*, 238–246.
- Billiet, J., & Witte, H. (1995). Attitudinal dispositions to vote for a ‘new’ extreme right-wing party: The case of ‘Vlaams Blok’. *European Journal of Political Research*, *27*, 181–202.
- Billig, M., & Tajfel, H. (1973). Social categorization and similarity in intergroup behavior. *European Journal of Social Psychology*, *3*, 27–52.
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods and Research*, *17*, 303–316.
- Buitendach, J. H., & De Witte, H. (2005). Job insecurity, extrinsic and intrinsic job satisfaction and affective organisational commitment of maintenance workers in parastatal. *South African Journal of Business Management*, *36*, 27–37.
- Cheng, G. L., & Chan, D. K.-S. (2008). Who suffers more from job insecurity? A meta-analytic review. *Applied Psychology: An international Review*, *57*, 272–303.
- De Cuyper, N., & De Witte, H. (2006). The impact of job insecurity and contract type on attitudes, well-being and behavioural reports: A psychological contract perspective. *Journal of Occupational and Organizational Psychology*, *79*, 395–409.

De Cuyper, N., Mäkikangas, A., Kinnunen, U., Mauno, S., & De Witte, H. (2012).

Cross-lagged associations between perceived external employability, job insecurity, and exhaustion: Testing gain and loss spirals according to the Conservation of Resources Theory. *Journal of Organizational Behavior*, *33*, 770–788.

De Weerd, Y., De Witte, H., Catellani, P., & Milesi, P. (2004). Turning right?

Socioeconomic change and the receptiveness of European workers to the extreme right. *Vienna: SIREN*.

De Witte, H. (1999). Job insecurity and psychological well-being: Review of the literature and exploration of some unresolved issues. *European Journal of Work and Organizational Psychology*, *8*, 155–177.

De Witte, H. (2000). Arbeidsethos en jobonzekerheid: meting en gevolgen voor welzijn, tevredenheid en inzet op het werk [Work ethic and job insecurity: measurement and consequences for well-being, satisfaction and performance]. In R. Bouwen, K. De Witte, H. De Witte, & T. Taillieu (Eds.), *Van groep naar gemeenschap*. Liber Amicorum Prof. Dr. Leo Lagrou (pp. 325–350). Leuven: Garant.

De Witte, H. (2005). *Job insecurity, union involvement, and union activism*. Gower Publishing, Ltd.

Doosje, B., Ellemers, N., & Spears, R. (1995). Perceived intragroup variability as a function of group status and Identification. *Journal of Experimental Social Psychology*, *31*, 410–36.

Ellemers, N. (1993). The influence of socio-structural variables on identity management strategies. *European Review of Social Psychology*, *4*, 27–57.

Ellemers, N., & Jetten, J. (2013). The many ways to be marginal in a group. *Personality and Social Psychology Review*, *17*, 3–21.

- Ellemers, N., Wilke, H., & Van Knippenberg, A. (1993). Effects of the legitimacy of low group or individual status on individual and collective identity enhancement strategies. *Journal of Personality and Social Psychology, 64*, 766–78.
- Feather, N. T., & Rauter, K. A. (2004). Organizational citizenship behaviors in relation to job status, job insecurity, organizational commitment and identification, job satisfaction and work values. *Journal of Occupational and Organizational Psychology, 77*, 81–94.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*, 39–50.
- Furnham, A. (1984). The Protestant work ethic: A review of the psychological literature. *European Journal of Social Psychology, 14*, 87–104.
- Gilboa, S., Shirom, A., Fried, Y., & Cooper, C. (2008). A meta-analysis of work demand stressors and job performance: examining main and moderating effects. *Personnel Psychology, 61*, 227–271.
- Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine, 9*, 139–145.
- Greenhalgh, L., & Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. *Academy of Management Review, 9*, 439–447.
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: positive behaviour in uncertain and interdependent contexts. *Academy of Management Journal, 50*, 327–347.
- Haslam, S. A. (2004). *Psychology in Organizations. The Social Identity Approach*. London: Sage.

- Haslam, S. A., Jetten, J., Postmes, T., & Haslam, C. (2009). Social identity, health and well-being: An emerging agenda for applied psychology. *Applied Psychology: An International Review*, 58, 1–23.
- Haslam, S. A., & Van Dick, R. (2011). A social identity approach to workplace stress. In D. De Cremer, R. Van Dick, & K. Murnighan (Eds.), *Social psychology and organizations*. (pp. 325–352), New York, NY: Routledge.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation and Conditional Process Analysis: A Regression-Based Approach*. Guildford: Guildford Press.
- Hellgren, J., Sverke, M., & Isaksson, K. (1999). A two-dimensional approach to job insecurity: Consequences for employee attitudes and well-being. *European Journal of Work and Organizational Psychology*, 8, 179-195.
- Hogg, M. A. (2000). Subjective uncertainty reduction through self-categorization: A motivational theory of social identity processes. *European Review of Social Psychology*, 11, 223-255.
- Hogg, M. A., & Terry, D. I. (2000). Social identity and self-categorization processes in organizational contexts. *Academy of Management Review*, 25, 121–140.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6, 1–55.
- International Labour Organisation (2015). *World Employment Social Outlook. The changing nature of jobs*. Geneva: International Labour Office. Downloaded from: http://www.ilo.org/global/research/global-reports/weso/2015-changing-nature-of-jobs/WCMS_368626/lang--en/index.htm
- Jahoda, M. (1982). *Employment and unemployment: A social-psychological analysis*. Cambridge: Cambridge University Press.

- Jahoda, M. (1997). Manifest and Latent Functions. In N. Nicholson, R. S. Schuler, & A. H. Van de Veen (Eds.), *The Blackwell Encyclopedic Dictionary of Organizational Behavior* (pp. 317–318). Oxford: Blackwell.
- Jetten, J., Branscombe, N. R., Spears, R., & McKimmie, B. M. (2003). Predicting the paths of peripherals: The interaction of identification and future possibilities. *Personality and Social Psychology Bulletin, 29*, 130–140.
- Jetten, J., O'Brien, A., & Trindall, N. (2002). Changing identity: Predicting adjustment to organizational restructure as a function of subgroup and superordinate identification. *British Journal of Social Psychology, 41*, 281–297.
- Kinnunen, U., Mäkikangas, A., Mauno, S., De Cuyper, N., & De Witte, H. (2014). Development of perceived job insecurity across two years: associations with antecedents and employee outcomes. *Journal of Occupational Health Psychology, 19*, 243–258.
- Kinnunen, U., Mauno, S., Nätti, J., & Happonen, M. (2000). Organizational antecedents and outcomes of job insecurity: a longitudinal study in three organizations in Finland. *Journal of Organizational Behavior, 21*, 443–459.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.
- Lim, V. K. (1996). Job insecurity and its outcomes: Moderating effects of work-based and nonwork-based social support. *Human Relations, 49*, 171–194.
- Mauno, S., & Kinnunen, U. (2002). Perceived job insecurity among dual-earner couples: Do its antecedents vary according to gender, economic sector and the measure used? *Journal of Occupational and Organizational Psychology, 75*, 295–314.
- Musick, M. A., & Wilson, J. (2003). Volunteering and depression: The role of psychological and social resources in different age groups. *Social Science and Medicine, 56*, 259–269.

- Muthén, L. K., & Muthén, B. O. (1998-2012). *Mplus user's guide*. Seventh Edition. Los Angeles, CA: Muthén & Muthén.
- Probst, T. (2000). Wedded to the job: Moderating effects of job involvement on the consequences of job insecurity. *Journal of Occupational Health Psychology, 5*, 63–73.
- Randel, A. E. (2002). Identity salience: A moderator of the relationship between group gender composition and work group conflict. *Journal of Organizational Behavior, 23*, 749–766.
- Rosenblatt, Z., & Ruvio, A. (1996). A test of a multidimensional model of job insecurity: The case of Israeli teachers. *Journal of Organizational Behavior, 17*, 587-605.
- Rousseau, D. M., & McLean Parks, J. (1993). The contracts of individuals and organizations. *Research in Organizational Behavior, 15*, 1–43.
- Satorra A., & Bentler, P. M. (2001). A scaled difference chi-square test statistic for moment structure analysis. *Psychometrika, 66*, 507–514.
- Schmitt, M. T., & Branscombe, N. R. (2001). The good, the bad and the manly: Threats to one's prototypicality and evaluations of fellow in-group members. *Journal of Experimental Social Psychology, 37*, 510–517.
- Schreurs, B. H., Van Emmerik, H. I. J., Günter, H., & Germeys, F. (2012). A weekly diary study on the buffering role of social support in the relationship between job insecurity and employee performance. *Human Resource Management, 51*, 259–279.
- Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology, 1*, 27–41.
- Selenko, E., & Batinic, B. (2013). Job insecurity and the benefits of work. *European Journal of Work and Organizational Psychology, 22*, 725–736.
- Selenko, E., Mäkikangas, A., Mauno, S., & Kinnunen, U. (2013). How does job insecurity relate to self-reported job performance? Analysing curvilinear associations in a

- longitudinal sample. *Journal of Occupational and Organizational Psychology*, 86, 522–542.
- Skitka, L. J. (2003). Of different minds: An accessible identity model of justice reasoning. *Personality and Social Psychology Review*, 7, 286–297.
- Staufenbiel T., & König, C. (2010). A model of the effects of job insecurity on performance, turnover intentions and absenteeism. *Journal of Occupational and Organisational Psychology*, 83, 101–117.
- Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*, 25, 173–180.
- Stride, C., Wall, T. D., & Catley, N. (2007). *Measures of Job Satisfaction, Organizational Commitment. Mental Health and Job-related Well-being. A Benchmarking Manual. 2nd ed.* Chichester: Wiley.
- Sutton, R. I., & Staw, B. M. (1995). What theory is not. *Administrative Science Quarterly*, 40, 371–384.
- Sverke, M., De Witte, H., Näswall, K., & Hellgren, J. (2010). European perspectives on job insecurity: Editorial introduction. *Economic and Industrial Democracy*, 31, 175–178.
- Sverke, M., & Hellgren, J. (2001). Exit, Voice and Loyalty Reactions to Job Insecurity in Sweden: Do Unionized and Non-unionized Employees Differ? *British Journal of Industrial Relations*, 39, 167–182.
- Sverke, M., Hellgren, J., & Näswall, K. (2002). No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology*, 7, 242–264.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel and L. W. Austin (Eds.). *Psychology of Intergroup Relations*. Chicago: Nelson-Hall.

- Thompson, J. A., & Bunderson, J. S. (2003). Violations of principle: Ideological currency in the psychological contract. *Academy of Management Review*, *28*, 571–586.
- Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis, *Psychometrika*, *38*, 1–10.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group*. Oxford: Blackwell.
- Van Knippenberg, D. (2000). Work motivation and performance: A social identity perspective. *Applied Psychology: An International Review*, *49*, 357–371.
- Van den Broeck, A., Sulea, C., Vander Elst, T., Fischmann, G., Iliescu, D., & De Witte, H. (2014). The mediating role of psychological needs in the relation between qualitative job insecurity and counterproductive work behavior. *Career Development International*, *19*, 526–547.
- Vander Elst, T., De Cuyper, N., Baillien, E., Niesen, W., & De Witte, H. (2014). Perceived control and psychological contract breach as explanations of the relationships between job insecurity, job strain and coping reactions: Towards a theoretical integration. *Stress and Health*. DOI: 10.1002/smi.2584.
- Vander Elst, T., De Witte, H., & De Cuyper, N. (2014). The job insecurity scale: A psychometric evaluation across five European countries, *European Journal of Work and Organizational Psychology*, *23*, 364–380.
- Vander Elst, T., Näswall, K., Bernhard-Oettel, C., De Witte, H., & Sverke, M. (2016). The effect of job insecurity on employee health complaints: A within-person analysis of the explanatory role of threats to the manifest and latent benefits of work. *Journal of Occupational Health Psychology*, *21*, 65–76.
- Vander Elst, T., Richter, A., Sverke, M., Näswall, K., De Cuyper, N., & De Witte, H. (2014). Threat of losing valued job features: The role of perceived control in mediating the

effect of qualitative job insecurity on job strain and psychological withdrawal. *Work and Stress*, 28, 143–164.

Vander Elst, T., Van den Broeck, A., De Cuyper, N., & De Witte, H. (2014). On the reciprocal relationship between job insecurity and employee well-being: Mediation by perceived control? *Journal of occupational and organizational psychology*, 87, 671–693.

Van Dick, R., & Haslam, S. A. (2012). Stress and well-being in the workplace: Support for key propositions from the social identity approach. In J. Jetten, C. Haslam, S. A. Haslam (Eds.). *The social cure: Identity, health and well-being* (pp. 175–194). New York, NY: Psychology Press.

Van Dick, R., Ullrich, J., & Tissington, P. A. (2006). Working under a black cloud: how to sustain organizational identification after a merger. *British Journal of Management*, 17, 69–79.

Van Winden, W. (2001). The end of social exclusion? On information technology policy as a key to social inclusion in large European cities. *Regional Studies*, 35, 861–877.

Warr, P. (1987). *Work, unemployment and mental health*. New York, NY: Oxford Press.

Werneke, U., Goldberg, D., Yalcin, I., & Üstün, B. T. (2000). The stability of the factor structure and the General Health Questionnaire. *Psychological Medicine*, 30, 823–829.

