



Moving on Up Now? A Meta-Analysis of the Associations Between Job Insecurity and Career-Related Outcomes

ORIGINAL ARTICLE

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ABSTRACT

Job insecurity constitutes uncertainty about the future of the current job. Such uncertainty is expected to impact attitudes and behaviors about one's work and career and how it will progress. The aim of the present study is to meta-analytically consolidate research on the associations between job insecurity and career-related outcomes. A further aim of the study is to explore two methodological moderators: study design (cross-sectional vs. longitudinal) and type of job insecurity measure (cognitive, affective, or combined). Based on a sample of 237 primary studies, our main results show that job insecurity was positively related to occupational and organizational turnover intention, job search behaviors, and knowledge hiding, and negatively related with career satisfaction, career opportunities, employability, and proactive skill development. In terms of the moderators, the associations were generally stronger in cross-sectional studies compared to longitudinal studies, while the impact of the type of job insecurity measure used was mixed. While our results inform research on job insecurity and career-related outcomes, more studies with a longitudinal design are needed on this research topic. Future research should also further examine how different types of job insecurity measures – cognitive, affective, or combined – are associated with career-related outcomes.

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Increases in less stable forms of employment (short-term, part-time contracts) and precariousness (uncertainty of job futures) are expected both globally (ILO 2022) and within the Scandinavian countries (Berglund et al. 2021), with increases in job insecurity perceptions as a likely consequence. At the same time, ongoing, fast-paced changes in the labor market due to technological advancements place high demands on employees to continuously update their skills and competencies to stay employable (World Economic Forum 2023). In combination with the individualization of work, career development and staying employable have to a large degree become an individual responsibility (Hirschi & Koen 2021). Taken together, these conditions make it important to understand how job insecurity is associated with how individuals view and manage their careers. In the present study we use the Conservation of Resources (COR) theory (Hobfoll 1989) in combination with sustainable career theory (De Vos, Van der Heijden, & Akkermans 2020) and career shocks (Akkermans, Seibert, & Mol 2018) to understand the mechanisms for how job insecurity is linked to outcomes related to individuals' careers.

While associations between job insecurity and health-related, work-related, and certain career-related outcomes (for instance turnover intentions) have been studied extensively during the last 40 years (for recent meta-analyses and reviews, see, e.g., Jiang, Xu, & Wang 2020; Jiang & Lavaysse 2018; Shoss 2017; Sverke et al. 2019), research on many career-related outcomes has only gained momentum in the last 15 years (e.g., Urbanaviciute et al. 2024). As individuals are progressively more responsible for their own career development, the impact of job insecurity on attitudes, intentions, and behaviors related to careers is increasingly important to understand.

With the aim of guiding continued research on this topic, the current study provides the first meta-analysis of the relationships between job insecurity and career-related outcomes, for instance career satisfaction and opportunities, proactive skill development, and occupational turnover intentions. We aim to contribute to the job insecurity literature by furthering our knowledge of how job insecurity relates to outcomes that may have implications for individuals' careers as well as for organizations. An additional contribution of this study is the bridging of the gap between the job insecurity and career literatures. By meta-analytically establishing the relationships between job insecurity and career-related outcomes, we aim to inform research on career self-management (e.g., Hirschi & Koen 2021), and organizational career management (e.g., Xie et al. 2023).

Our brief review presented below indicates that there is some degree of variation in the associations between job insecurity and career-related outcomes across studies. We therefore take an exploratory stance, and do

not pose any specific hypotheses about the nature of the relationship between job insecurity and the outcomes included. We explore two methodological moderators in the study: study design (cross-sectional vs. longitudinal studies) and type of job insecurity measure (cognitive, affective, or combined).

THE NATURE OF JOB INSECURITY

In their seminal work, Greenhalgh and Rosenblatt (1984) defined job insecurity as 'the perceived powerlessness to maintain desired continuity in a threatened job situation' (1984, p. 438). Since then, many definitions have been put forth, and generally job insecurity is conceptualized as a subjective phenomenon (De Witte 1999), which involves experiencing uncertainty about the job future (van Vuuren & Klandermans 1990), and a 'discrepancy between the level of security a person experiences and the level she or he might prefer' (Hartley et al. 1991, p. 7). Hence, job insecurity is when an employee perceives a threat to the continuance of the current job, but there is no certainty about being made redundant, and the potential job loss would be involuntary.

Job insecurity has been conceptualized and operationalized in different ways: sometimes as a general or global construct, and sometimes as consisting of distinct dimensions (Lee, Huang, & Ashford 2018). One multidimensional approach considers quantitative (worry about job loss) and qualitative (worry about losing valued job features) dimensions (Greenhalgh & Rosenblatt 1984; Hellgren et al. 1999). In the present study, we focus on the perceived threat of job loss (i.e., quantitative job insecurity) given that most research has focused on quantitative job insecurity, enabling an adequate sample size for this study. Furthermore, qualitative job insecurity measures sometimes include aspects such as the risk of loss of professional development opportunities or career development, which may overlap with the career-outcomes of interest in the present study. Another conceptual approach differentiates between a cognitive (beliefs and awareness) and an affective (emotional state) component of job insecurity (Borg & Elizur 1992; Lee et al. 2018). The cognitive/affective distinction highlights differences between perceptions of probability (cognitive insecurity) and feelings and fears (affective insecurity) related to job insecurity. Previous studies have demonstrated that associations between job insecurity and many outcomes may be different depending on whether the cognitive or affective component of job insecurity makes up the measure (e.g., Lee et al. 2018). In our moderator analysis we therefore distinguish between cognitive, affective, and combined operationalizations of the construct.

A large body of research now exists with evidence that perceived job insecurity is a debilitating work-

related experience. There is also support for job insecurity being an antecedent (rather than an outcome) of these negative work-related experiences and behaviors. For example, a review of published longitudinal research studies (De Witte, Pienaar, & De Cuyper 2016) shows that the evidence is the strongest for ‘normal’ causation, that is, that the experience of job insecurity is related to subsequent poor health and wellbeing outcomes, as well as subsequent negative organizational attitudes and behaviors. Meta-analyses have corroborated the association between job insecurity and increased risk of both physical (Ferrie et al. 2016; Lang et al. 2012) and mental health complaints (Kim & von dem Knesebeck 2015; Llosa et al. 2018). Meta-analyses focusing on work-related outcomes of job insecurity consistently report negative associations with various work-related attitudes and behaviors (Cheng & Chan 2008; Jiang & Lavaysse 2018; Sverke, Hellgren, & Näswall 2002), including job performance (Sverke et al. 2019). However, no previous meta-analysis has systematically focused on the associations between job insecurity and career-related variables. By addressing this gap in the literature, the present meta-analysis adds to our understanding of the potential consequences of job insecurity beyond the immediate job situation.

JOB INSECURITY AND CAREERS

Jobs can vary in duration and significance, forming anything from a minor component to a central aspect of an individual’s career. A career, however, is more broadly defined as ‘the pattern of work-related experiences that span the course of a person’s life’ (Greenhaus, Callanan, & Godshalk 2019, p. 11). These experiences encompass both subjective elements, such as needs, values, and expectations, and objective aspects, including positions held, duties, and activities performed. The present study focuses on how job insecurity relates to career-related attitudes and behaviors.

Sustainable career theory addresses the long-term development of individuals’ careers with the goal of attaining or maintaining a good person–career fit, indicated by a happy, healthy, and productive worker (De Vos et al. 2020). The theory focuses on the individual, but considers the individual as embedded in different contexts that change over time. In order to have a sustainable career, individuals adapt proactively and reactively to these changes. Perceived job insecurity can be a consequence of such contextual changes that individuals have to adapt to in their careers. For many people, the perception of a threat to the job persists over time (i.e., chronic job insecurity; Heaney, Israel, & House 1994), and job insecurity can indeed be an inherent feature of the job (e.g., precarious employment; Kalleberg 2009). Employees experiencing job insecurity can adaptively respond to threats to the job, such as by

acquiring new skills or seeking alternative career paths (Klehe et al. 2012).

Many contemporary career theories have a strong individual agentic focus as a common denominator (De Vos et al. 2020). That is, a career is to a large degree seen as a personal project where the individual is responsible for their own employability and career development. At the same time, individuals do not have total control over their careers (Greenhaus et al. 2019) as individuals’ careers are also embedded in different contexts, such as HR policies and practices at the organizational level, and digital transformations in the occupational sector (De Vos et al. 2020). Hence, individual agency in the career is only possible within the boundaries imposed by these contexts, as the individual negotiates meaning and agency while reacting and adjusting to contextual changes in order to achieve or regain person–career fit. However, when individuals experience job insecurity, they might perceive a reduced ability to make choices that align with their long-term career goals, which impacts their sense of agency.

In contrast to chronic job insecurity, job insecurity may also arise suddenly (acute job insecurity; Heaney et al. 1994), for example in the context of unexpectedly announced layoffs or closures. Thus, job insecurity may also constitute what the career literature refers to as a negative career shock (Seibert et al. 2013) which is ‘a disruptive and extraordinary event that is, at least to some degree, caused by factors outside the focal individual’s control and that triggers a deliberate thought process concerning one’s career’ (Akkermans et al. 2018, p. 4). An important determinant of the reaction to job insecurity and career shock is the individual’s access to resources. In order to understand how job insecurity relates to the career-related outcomes of interest in the present study, we rely on Conservation of Resources (COR) theory (Hobfoll 1989; Hobfoll et al. 2018).

A COR PERSPECTIVE ON THE RELATIONSHIP BETWEEN JOB INSECURITY AND CAREER-RELATED OUTCOMES

COR theory posits that human beings are driven to acquire, preserve, and grow their resources. Such resources are broadly defined as anything individuals deem valuable, and, more importantly, as aspects enabling their goal attainment (Halbesleben et al. 2014). These resources include objects, conditions, personal resources, and energy resources. Stress results when i) resources are lost, ii) resources are perceived as being threatened with loss, or iii) individuals fail to gain resources following significant investment in order to achieve resource gain. Being employed is considered a prominent resource (De Witte et al. 2016), and job insecurity presents the perceived threat to that resource (De Witte 1999; Probst 2003; Shoss et al. 2023), making job insecurity an important stressor.

COR theory advances four principles. Given the centrality and significance of gainful employment as a resource, the first principle states that individuals should evaluate loss of employment (or threat of loss, see Shoss et al. 2023) as more ‘psychologically harmful’ (Halbesleben et al. 2014, p. 1335) than the gain of resources. Resource loss and threat are deemed to be more powerful, happen quicker, and their effects felt for longer, compared to resource gain (Hobfoll et al. 2018). The second principle states that resources have to be invested in order to prevent or recover from resource loss, or to obtain new resources (Halbesleben et al. 2014; Hobfoll et al. 2018). Thus, in a threatened job situation, an individual may invest resources to stave off job insecurity (for example, by heightening visibility in the organization, or strategically sharing more knowledge in order to prevent job loss), or by engaging in activities that lead to new resources (e.g., networking or skill development). Resource investment can be done either directly (*resource replacement*), for example by finding another job (Shoss et al. 2020), or more indirectly or symbolically (*resource substitution*), such as for example seeking positive feedback to support self-esteem (Hobfoll 1989; 2001).

The third principle of COR states that gaining resources becomes more important in the context of resource loss. In the words of Hobfoll (2011, p. 132): ‘as people experience more resource loss, resource gain processes accelerate in speed and increase in magnitude of their effect.’ Being offered the opportunity to participate in training (resource gain), whilst experiencing job insecurity, should thus carry more significance than being offered training when one experiences secure employment. Finally, the fourth principle states that once resources are diminished or depleted, individuals could become defensive in order to keep the resources they have. Applied to the threat of job loss, this may manifest as individuals engaging in more counterproductive work behaviors (Sverke et al. 2019), or more knowledge hiding (Shoss et al. 2023).

COR theory (Hobfoll 1989; Hobfoll et al. 2018) highlights that resources—such as self-esteem, family, and employment—are universally valued across individuals and cultures. These resources are critical for enabling resource conservation and resource investment, as individuals rely primarily on resources they already possess or can acquire from their environment. Although resources are generally shaped by shared social and cultural valuations, individual appraisal becomes particularly significant when uncertainty characterizes the stressor, as is the case with subjective job insecurity (Hobfoll 2001). In such contexts, individuals assess the importance and adequacy of their resources, which can lead to two distinct processes: re-evaluation (adjusting the perceived value of resources) and reinterpretation

(changing from perceived threat to challenge) (Hobfoll 1989).

When individuals experience job insecurity, re-evaluation allows them to reconsider events and their effects (Hobfoll 1989). Re-evaluation may lead them to diminish the value of their current employment as a resource, thereby protecting their broader resource pool. This can manifest as lower job satisfaction or reduced organizational commitment (Cheng & Chan 2008; Jiang & Lavaysse 2018; Sverke et al. 2002). Additionally, job insecurity has been framed through the lens of social identity theory (Selenko, Mäkikangas, & Stride 2017), where it is seen as a threat to individuals’ self-concept as ‘employed’ or as members of the working population. To safeguard their positive self-perception, individuals might devalue their insecure job, reframing it as less central to their identity and less worth preserving.

Reinterpretation, on the other hand, involves shifting the perception of job insecurity from a threat to an opportunity. Individuals’ focus may shift from potential losses to potential gains (Hobfoll 1989). For instance, individuals might view the possibility of job loss as a chance to explore alternative career paths or seek better employment. This adaptive reframing can motivate resource investment behaviors, such as developing new skills or strengthening professional networks, which may enhance their long-term employability. Proactive coping strategies, aimed at accumulating resources to prevent future resource loss (Halbesleben et al. 2014), exemplify this process. These strategies may focus on enhancing resources like knowledge, skills, and abilities to buffer against current stressors and support career resilience.

While the discussion of COR theory above proposes different mechanisms of resource investment and conservation as ways of linking job insecurity to career-related outcomes, the aim was not to propose specific mechanisms here. As our review of career-related outcomes below also reveals, the evidence for specific mechanisms tying job insecurity to career-related outcomes is sometimes mixed. Our approach is rather to reveal these mechanisms by performing a meta-analytic review of existing findings.

CLASSIFYING CAREER-RELATED OUTCOMES

We organize our outcome variables in line with the previous meta-analysis of Sverke et al. (2002) in two broad categories: attitudes and behaviors. We opt to classify outcomes as career-related if constructs are inherently tied to an individual’s broader career, rather than being limited to their current job. We consider organizational turnover intention, which could be a precursor to actual turnover. Specifically, career-related attitudes reflect evaluative or emotional responses to aspects of one’s career, such as satisfaction with or commitment to the career. Under career-related behaviors, on the other

hand, we have included phenomena explicitly framed and defined as behaviors, for example behavior aimed at managing knowledge (knowledge hiding and knowledge sharing), or actions aimed at career enhancement (career planning) or change (job search behaviors).

Career-related attitudes

Previous meta-analyses suggest that job insecurity is negatively related to organizational commitment and job satisfaction as two typical examples of work-related attitudes (Cheng & Chan 2008; Sverke et al. 2002). In line with the definition of careers above, that a career can be conceived as a potential series of jobs, we assume that job insecurity may also relate negatively to the attitudes career commitment and career satisfaction. Numerous studies, including meta-analyses (Cheng & Chan 2008; Jiang & Lavaysse 2018; Sverke et al. 2002) have documented a positive relationship between job insecurity and turnover intentions, and we therefore expect that job insecurity may also relate positively to occupational turnover intentions. Experiencing job insecurity in a chosen career may lead individuals to think about their career opportunities going forward. A willingness to participate in training would signal resource investment on the part of an employee experiencing job insecurity—which could be understood as proactive coping aimed at mitigating the threat of job loss (Halbesleben et al. 2014) by expanding existing resource pools. Finally, as perceptions of employability also constitute a personal resource (van Harten et al. 2021), we include it as an attitudinal career-related outcome of job insecurity.

Career commitment has been defined as ‘an individual’s willingness to keep membership in an occupational field, or an emotional linkage between an individual and his or her vocation’ (Zhu et al. 2021, p. 506). Previous studies have reported both positive (e.g., Reilly et al. 1993) and negative associations (e.g., Huang et al. 2021) between job insecurity and career commitment.

Career satisfaction is a measure of subjective career success, capturing ‘employees’ feelings about, emotional reactions to, and satisfaction with, their career success’ (Ng & Feldman 2014, p. 170). Empirical studies have reported negative associations between job insecurity and career satisfaction (Zhang et al. 2015).

Occupational and organizational turnover intentions are two types of withdrawal that have been studied in the context of job insecurity. While research has largely focused on turnover from the current organization, we extend the same reasoning to intentions to leave the current occupation, even if occupational turnover intentions may be acted on less frequently than organizational turnover intentions. Very few studies have investigated the association between job insecurity and occupational turnover intentions, but the few that have typically report that higher levels of job insecurity are

associated with higher levels of occupational turnover intentions (e.g., Hollywood et al. 2020).

Perceived career opportunities refer to the anticipated career development going forward. Drawing on reasoning that the experience of job insecurity may have long-term negative psychological reactions (e.g., De Witte 2016), a possible outcome of job insecurity is that the expectations employees have regarding future opportunities in their career may be negatively affected. Overall, primary studies have reported negative associations between job insecurity and perceived career opportunities (e.g., Giebe & Rigotti 2020).

Willingness to participate in training (e.g., formal learning activities such as seminars or online courses) could be one way to expand current resources when faced with the threat of job loss. In line with this, some research has reported a positive association between quantitative job insecurity and willingness to participate in training (Sanders et al. 2011; Van Hootegem et al. 2019). However, a study on the relationship between qualitative job insecurity and work-related learning (De Cuyper, Smet, & De Witte 2022) found that individuals reporting higher qualitative job insecurity engaged in less work-related learning, indicating that the nature of the association may depend on the nature of experienced job insecurity.

Perceived employability is defined as the extent to which individuals feel there are other job opportunities available outside the current organization, if they needed to look for alternative employment (Berntson & Marklund 2007; Vanhercke et al. 2014). The nature of the relationship between job insecurity and employability presented in the literature varies; some suggest that job insecurity prompts activities that support employability which would result in a positive association (Direnzo & Greenhaus 2011), but most research reports a negative association between job insecurity and employability, explained by job insecurity resulting in defensive reactions and less investment in future employability. In the present study, we follow empirical (De Cuyper et al. 2012) and meta-analytical evidence (Jiang et al. 2020) indicating that job insecurity perceptions relate negatively to employability.

Career-related behaviors

As career-related behaviors that may be a function of the experience of job insecurity, we firstly consider job search behaviors, knowledge sharing and knowledge hiding. Searching for alternative employment would present a means of resource replacement. Knowledge sharing and knowledge hiding may represent resource investment (knowledge sharing reflects behavior aimed at helping colleagues in the current job), or resource conservation strategies (knowledge hiding deals with *intentionally* hiding information), respectively. Helping behavior may be considered an

example of organizational citizenship behaviors, with the aim of safeguarding one's own career against the threat of job loss. On the other hand, hiding knowledge from colleagues may serve as a short-term boost to own productivity (Sulistiawan et al. 2022) potentially enhancing one's own career. We further include concepts most often found in the career literature, namely proactive career behaviors. Specifically, career planning, networking and proactive skill development are included. Although some previous authors (e.g., Koen and Parker 2020) consider proactive career behaviors as antecedents to job insecurity, we consider these behaviors as outcomes, since the mentioned authors specifically acknowledge that proactive behaviors may also develop in response to feelings of insecurity. Finally, we consider actual turnover as arguably the most severe career-related behavioral outcome of job insecurity.

Job search behaviors have been suggested as a proactive behavioral response to perceived job insecurity (Shoss 2017), directed at replacing the resource that potentially will be lost. Previous research, including a meta-analysis (Jiang & Lavaysse 2018) as well as cross-sectional (Kim et al. 2021) and longitudinal (Shoss et al. 2020) findings, has consistently indicated that job insecurity is positively related to job search behaviors.

Knowledge sharing is defined as '...the provision of task information and know-how to help others and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures' (Wang & Noe 2010, p. 117). Empirically, both positive (Ali et al. 2021) and negative associations (Shamsudin et al. 2016) have been reported between job insecurity and knowledge sharing. Knowledge sharing is related to, but different from, knowledge hiding (Connelly et al. 2012).

Previous authors have considered *knowledge hiding* as a mechanism through which employees try to protect their jobs by maintaining their unique knowledge, thereby making themselves indispensable (Shoss et al. 2023). Knowledge hiding is defined as 'the intentional attempt to withhold or conceal knowledge that has been requested by another individual' (Connelly et al., 2012, p. 67). It includes behaviors such as playing ignorant or pretending not to have the knowledge requested (Connelly et al. 2012). Results from empirical studies indicate that there is a positive association between job insecurity and knowledge hiding (e.g., Shoss et al. 2023; Zhang et al. 2022).

Career planning involves gathering in-depth information about alternative job roles, employers, or professions. In other words, it involves having a proactive mindset, creating possibilities, and exploring other options. The association between job insecurity and career planning remains unclear as studies have reported both positive (Nabi 2000) and negative correlations (Sanders et al. 2011).

Networking is another behavior we consider. By getting introduced to and acquainted with people who can influence one's career, new career possibilities may emerge. For instance, building a professional network can give employees access to information about upcoming vacancies or training opportunities. At least one study (Koen & Parker 2020) showed a positive association between job insecurity and networking behavior. However, other research (De Cuyper et al. 2019) shows that the most insecure employees were the ones who engaged the least in networking behaviors. The latter finding would suggest that when facing job insecurity, employees may also feel inclined to protect their current resources in the form of their existing networks rather than investing further resources in developing new networks or contacts.

When employees engage in *proactive skill development*, they take the initiative to upskill or expand their work-related knowledge and competencies (Koen & Parker 2020). Empirical findings so far are mixed: Koen and Parker (2020) reported a weak positive correlation between job insecurity and proactive skill development in a sample of employees with unstable jobs. However, the same study found a weak negative correlation between these variables in a sample of employees with stable jobs. Other primary studies have also reported negative associations between job insecurity and proactive development of work skills (e.g., Lin 2015).

Actual turnover reflects the behavior of quitting the current job. It is a behavioral outcome that has only been investigated in one previous meta-analysis on job insecurity (Jiang & Lavaysse 2018), where a weak positive correlation with actual turnover was reported (based on seven studies). Given previous meta-analytic findings that turnover intentions are strongly related to actual turnover (e.g., Wong & Cheng 2020), and that job insecurity is related to turnover intentions (Cheng & Chan 2008; Sverke et al. 2002), it is likely that job insecurity is positively related to actual turnover.

MODERATORS

To further understand the robustness of the job insecurity–outcome relationships, the investigation of methodological moderators is recommended (De Witte et al. 2015; cf. Rudolph et al. 2020; Schmidt & Hunter 2015). While previous meta-analyses of job insecurity and its correlates have investigated demographic (Cheng & Chan 2008; Hur 2022; Sverke et al. 2002), or geographical factors such as country of data collection (Hur 2022), economic contexts (Llosa et al. 2018), type of welfare system and union density (Sverke et al. 2019), the majority of moderators have been of methodological nature (Cheng & Chan 2008; Jiang & Lavaysse 2018; Llosa et al. 2018; Sverke et al. 2002, 2019). In the current meta-analysis, we investigate two methodological moderators to examine how the results generalize across different

study designs (cross-sectional and longitudinal) and the operationalization of job insecurity (cognitive, affective, or a combination). These moderators were considered important as both study design and operationalization may result in different associations across studies, not due to the nature of the relationship but due to artifacts of how the research is conducted, and influencing the conclusions drawn about the strength of the associations between job insecurity and other variables.

Study design

The strength of the relationship under investigation may depend on the chosen study design (cross-sectional or longitudinal studies), which has also been shown in a previous meta-analysis (Sverke et al. 2019). Some outcomes might manifest synchronously with job insecurity experiences, and then the relationship might best be detected through cross-sectional designs; other outcomes may evolve over a longer period of time, and in this instance cross-sectional studies might misrepresent the actual strength of the relationship (Sverke et al. 2002). In addition, cross-sectional associations may be inflated due to common method variance (Podsakoff et al. 2012), and longitudinal designs typically minimize the risk of such bias (Spector 2019), potentially also returning weaker associations. Our literature review describes variations across studies in the strength of the associations between job insecurity and the career-outcomes included in the present study, which may be due to study design. It is plausible that the career-related outcomes may present synchronously with the experience of job insecurity (for example, lower career satisfaction when job insecurity is higher) or as a delayed reaction (greater actual turnover) which is observable in longitudinal studies. We do not have any specific expectations about the difference in strength of associations between cross-sectional and longitudinal designs, except that it is likely that the associations will be different.

Operationalization of job insecurity

Whilst affective job insecurity has been suggested to be the best representation of job insecurity (Reisel & Banai 2002; Sverke et al. 2002), job insecurity is often conceptualized as a cognitive phenomenon (Huang et al. 2010). However, the way job insecurity is operationalized varies in the literature. There are measures that only use the affective (Huang et al. 2010) or cognitive (Ashford, Lee & Bobko 1989) operationalization of job insecurity, and there are also measures that include the affective and cognitive component as separate subscales and effectively treat them as different constructs (Mauno & Kinnunen 2002; Probst 2003). Other measures incorporate both components, and hence are 'mixed' or 'combined' job insecurity measures (e.g., De Witte 1999; Hellgren et al. 1999; Huang et al. 2012; Vander Elst et

al. 2014). Previous research suggests that cognitive and affective job insecurity may be associated with different outcomes and that the strength of the relationship may vary depending on which dimension of job insecurity is investigated (Pienaar et al. 2013). In a recent meta-analysis (Jiang & Lavaysse 2018) affective job insecurity had stronger associations with employee outcomes than cognitive job insecurity. Given the variation in strength of the associations depending on the type of measure used, a quantitative summary of the current research is called for. While it is unclear what may be expected, a meta-analysis will serve to bring clarity to the potential differences in the associations.

METHOD

LITERATURE SEARCH AND INCLUSION CRITERIA

We conducted literature searches in the APA PsycInfo database and in the EBSCO Discovery Service (EDS) index. Overall, the search focused on peer-reviewed articles written in English published between January 1980 and July 2023 in peer-reviewed, academic journals. The year 1980 was chosen as the starting point, because the 1980s is often considered the decade where research on job insecurity started, with the seminal article by Greenhalgh and Rosenblatt (1984). The literature search was done in two steps, the first (Step 1) capturing studies on job insecurity and any correlates, and the second (Step 2) more specifically focusing on career-related outcomes. For the initial search (Step 1), comprising January 1980–June 2018, the following Boolean search string was used: 'job insecurity' OR 'job uncertainty' OR 'job security' OR 'job security satisfaction' OR 'satisfaction with job security' OR 'employment uncertainty'. We did a supplementary follow-up search (Step 2) in August 2023 to capture articles published between July 2018 and July 2023 using a Boolean search string with more specific search terms for career-related outcomes, learning, employability, and turnover in order to identify relevant articles that matched the more specific scope of this meta-analysis. These search terms had been selected based on the coding of the articles (described below) identified in the initial literature search (Step 1): ('job insecurity' OR 'job uncertainty' OR 'job security' OR 'job security satisfaction' OR 'satisfaction with job security' OR 'employment uncertainty') AND (turnover* OR 'career change' OR 'job change' OR 'job search' OR exit OR employability OR 'internal employability' OR 'external employability' OR 'formal learning' OR 'informal learning' OR 'learning intention' OR 'satisfaction with learning' OR training OR 'workplace learning' OR 'competency development' OR career OR 'career satisfaction' OR 'career opportunity' OR 'career commitment' OR 'career planning' OR 'knowledge hiding' OR 'knowledge sharing').

The literature search resulted in a total sample of 2,656 studies (Step 1: $N = 1,992$; Step 2: $N = 664$). These studies were reviewed and included if they met the following criteria: (a) quantitative job insecurity measured as a subjective perception (quantitative, cognitive, affective, or dissatisfaction with job security), (b) at least one outcome of relevance needed to be studied (e.g., career satisfaction, willingness to participate in training, employability or actual turnover), (c) relevant statistics, that is, correlations between job insecurity and at least one outcome or other statistics that can be transformed to a correlation coefficient needed to be present and not include more than five control variables, and (d) a working population was the target of the study. After applying the above criteria, 237 independent studies (276 samples, 72 countries, total $N = 395,351$) were included in our effective sample. See Table 1 for a summary of the included study variables and examples of variable names in the primary studies for each variable. The primary studies included in the meta-analysis are listed in Appendix A.

CODING OF THE STUDIES

Each of the authors was responsible for coding a set number of studies. To calibrate and standardize coding, a number of studies were coded by at least

two coders. Studies were coded for sample size, outcome(s) of interest, reliability (of job insecurity and respective outcome), correlations between job insecurity and outcome(s), study design (cross-sectional or longitudinal), and job insecurity measure (affective, cognitive, or combined). If information on qualitative and quantitative job insecurity was present, only quantitative job insecurity was included. For study design, if both cross-sectional and longitudinal relations between job insecurity and the outcomes of interest existed, we used the longitudinal associations. When there were several waves of data, we used the correlation between job insecurity measured at the first time point and the outcome measured at the second time point. For studies that had a longitudinal design but only reported associations between job insecurity and the outcomes of interest within one time point, we coded these studies as cross-sectional. For type of job insecurity measures, we looked up the original reference for the scale that had been used, and documented the number of items used in the study as well as the full item wordings. Based on the item wording, we assessed whether the scale consisted of affective, cognitive, or combined job insecurity items. In those cases where only a sample item was presented and the original

VARIABLE	EXAMPLES OF INCLUDED VARIABLE NAMES	AVERAGE α
Job insecurity	Job insecurity, job security (R), job uncertainty, job security satisfaction	.83
Career-related attitudes		
Career commitment	Career commitment, advancement motivation	.81
Career satisfaction	Career satisfaction, satisfaction with career development, satisfaction with career progression, career insecurity (R)	.86
Occupational turnover intentions	Occupational turnover intention(s), intention to leave the profession	.85
Organizational turnover intentions	Turnover intention(s), intention to leave, intention to quit, intention to stay (R), intention to remain (R)	.82
Career opportunities	Future career success, promotional opportunity, career advancement, perceived career opportunities, career opportunity	.83
Willingness to participate in training	Willingness to participate in training, intention to participate in training	.87
Employability	Employability, perceived employability, external employability, alternatives in the labor market, perceived labor market opportunities	.84
Career-related behaviors		
Job search behavior	Job search (behavior), proactive job search (behavior)	.89
Knowledge hiding	Knowledge hiding, knowledge hiding behavior, knowledge hoarding	.87
Knowledge sharing	Knowledge sharing, knowledge sharing behavior	.85
Career planning	Career planning, proactive career planning, career orientation	.83
Networking	Networking behavior, proactive networking	.86
Proactive skill development	Proactive skill development, employee development, career enhancing strategies, proactivity towards the career	.85
Actual turnover	Turnover, actual turnover, voluntary (organizational) turnover	.91

Table 1 Variables Included in the Meta-analysis, Examples of Included Variable Names Covered by the Primary Studies, and Average Reliability (Cronbach's alpha) across Samples.

Note: R = reverse scored.

scale could not be identified, or when the authors had constructed the scales themselves, we were not able to code the type of scale and these studies were left out of the moderator analysis. Type of measure was assessed by two of the co-authors and if there was an inconsistency in judgement it was discussed by all co-authors until a consensus was reached. Our assessment is in line with the categorization in Lee et al. (2018).

META-ANALYTIC PROCEDURES

Bivariate effect sizes

We conducted random-effects meta-analysis (Schmidt & Hunter 2015) to calculate mean correlations between job insecurity and the career-related outcomes. We used the *psychmeta* package (Dahlke & Wiernik 2019) in *R* to calculate correlations corrected for attenuation and sampling error ($\bar{\rho}$). When correcting for attenuation, we used the reported reliabilities (Cronbach's alpha) for job insecurity and the career-related variables. If reliability estimates were not reported, we imputed values by selecting random values from the existing information ('full bootstrap'). We computed 95% confidence intervals (CI) for each corrected correlation coefficient to indicate precision of the estimates. Coefficients for which the confidence intervals did not include zero were considered significant. We also calculated 80% credibility intervals (CR); wide credibility intervals that include zero indicate the potential presence of moderators.

Moderator analyses

We explored the data for two a-priori specified moderators, study design, with two levels (cross-sectional or longitudinal), and type of job insecurity measure, with three levels (affective, cognitive, or a combination). Because these moderators were specified in advance, we conducted sub-group analyses for all variables, regardless of whether heterogeneity statistics (such as CR, I^2 or Q) were significant or whether the main effect was significant. However, we did examine these statistics, using conventional cut-offs for considering the presence of a moderator: the credibility (CR) interval including zero (Schmidt & Hunter 2015), I^2 above 75 (indicating that 75% or more of the variance between studies is due to heterogeneity rather than chance), and significant Q coefficients (indicating whether the studies estimate a common population effect size, where a significant coefficient indicates heterogeneity). For each variable, we calculated the corrected correlation coefficient for each sub-group, as well as the difference in correlation coefficients between sub-groups, and 95% confidence intervals around this difference. A moderator effect was considered significant if the confidence interval for the difference did not include zero. Moderator analyses were conducted for all variables where the subgroups consisted of two or more studies.

RESULTS

MAIN EFFECTS

The results of the main effects meta-analyses are shown in Table 2. For *career-related attitudes*, job insecurity was negatively associated with career satisfaction and career opportunities, as well as perceived employability. There was a positive association between job insecurity and both occupational and organizational turnover intentions. Regarding *career-related behaviors*, job insecurity was negatively related to proactive skill development and positively associated with job search behaviors and knowledge hiding. There were non-significant associations between job insecurity and two career-related attitudes (career commitment and willingness to participate in training), as well as four of the career-related behaviors (knowledge sharing, career planning, networking behaviors, and actual turnover).

MODERATOR ANALYSES

Study design

The results of the analyses investigating the moderating effects of study design can be found in Table 3. For *career-related attitudes*, we found significant differences between cross-sectional and longitudinal studies for career satisfaction, and occupational and organizational turnover intentions. In cross-sectional studies, job insecurity was more strongly associated with career satisfaction ($Q = 1230.13$, $p = .001$, $\text{diff} = -.29$, CI $[-0.43, -.16]$, cross-sectional: $\bar{\rho} = -.61$, $[-.67, -.56]$, longitudinal: $\bar{\rho} = -.32$, $[-.57, -.08]$), occupational turnover intention ($Q = 30.20$, $p = .001$, $\text{diff} = -.11$, CI $[0.08, .29]$, cross-sectional: $\bar{\rho} = .32$, $[.15, .49]$, longitudinal: $\bar{\rho} = .21$, $[-.30, .72]$), and organizational turnover intention ($Q = 4775.12$, $p = .001$, $\text{diff} = -.15$, CI $[-.08, -.22]$, cross-sectional: $\bar{\rho} = .40$, $[.37, .43]$, longitudinal: $\bar{\rho} = .25$, $[.18, .31]$). Moderator tests were also possible for willingness to participate in training and employability, but these yielded non-significant results. For *career-related behaviors*, moderator tests were possible for job search behavior, knowledge hiding, proactive skill development, and actual turnover but the associations did not differ significantly between cross-sectional and longitudinal studies.

Operationalization of job insecurity

The results of the analyses investigating the moderating effects of type of job insecurity measure are reported in Table 4. Regarding *career-related attitudes*, we found significant differences across the types of job insecurity measure for the associations between job insecurity and career satisfaction ($Q = 1230.13$, $p = .001$), organizational turnover intentions ($Q = 4772.35$, $p = .001$), and employability ($Q = 1907.36$, $p = .001$). For career satisfaction, cognitive measures had a stronger negative association ($\bar{\rho} = -.63$, $[-0.74, -.52]$) than affective ($\bar{\rho} = -.40$, $[-0.50,$

OUTCOME	<i>k</i>	<i>N</i>	$\bar{r}$	$\bar{\rho}$	SD_{rc}	95% CI	80% CR	<i>Q</i>	<i>I</i> ²
Career-related attitudes									
Career commitment	10	5,021	-.11	-.16	.32	[-.38, .07]	[-.59, .27]	266.88***	96.63
Career satisfaction	16	122,384	-.50	-.61	.09	[-.66, -.56]	[-.74, -.49]	1230.13***	98.78
Occupational turnover intention	7	2,371	.26	.30	.13	[.18, .42]	[.13, .47]	30.20***	80.13
Organizational turnover intention	152	230,503	.31	.39	.17	[.36, .42]	[.18, .60]	4775.12***	96.84
Career opportunities	16	22,031	-.13	-.15	.22	[-.27, -.03]	[-.45, .15]	782.09***	98.08
Willingness to participate in training	5	5,394	-.01	-.01	.08	[-.11, .09]	[-.12, .10]	20.93***	80.89
Employability	64	95,261	-.12	-.16	.18	[-.20, -.11]	[-.38, .07]	1907.36***	96.70
Career-related behaviors									
Job search behaviors	14	10,008	.23	.31	.13	[.23, .39]	[.14, .48]	110.24***	88.21
Knowledge hiding	12	3,919	.34	.39	.16	[.29, .49]	[.19, .59]	88.64***	87.59
Knowledge sharing	5	1,298	.06	.07	.19	[-.17, .31]	[-.20, .35]	26.54***	84.93
Career planning	7	2,759	-.10	-.11	.23	[-.32, .11]	[-.43, .22]	81.78***	92.66
Networking behavior	3	4,562	-.10	-.11	.11	[-.38, .16]	[-.31, .08]	26.59***	92.48
Proactive skill development	13	9,395	-.09	-.11	.16	[-.20, -.01]	[-.31, .10]	159.24***	92.46
Actual turnover	9	2,906	.12	.15	.20	[-.00, .30]	[-.11, .41]	67.99***	88.23

Table 2 Results of Meta-analyses: Main Effects.

Note: *k* = number of studies contributing to meta-analysis; *N* = total sample size; $\bar{r}$ = mean observed correlation; $\bar{\rho}$ = mean true-score correlation; SD_{rc} = observed standard deviation of corrected correlations (r_c); CI = confidence interval around $\bar{\rho}$; CR = credibility interval around $\bar{\rho}$. Correlations corrected individually. *Q* = Cochran's χ -squared statistic *Q* (chi-square test of heterogeneity, I^2 = estimated percent variance not accounted for by sampling error or other artifacts (attributable to moderators and uncorrected artifacts)); * $p < .05$, *** $p < .001$. **Bold** denotes significant corrected correlations based on the 95% CI not including zero.

OUTCOME	<i>k</i>	<i>N</i>	$\bar{r}$	$\bar{\rho}$	SD_{rc}	95% CI	80% CR	DIFF [95% CI]
Career-related attitudes								
Career satisfaction								-.29 [-.43, -.16]
Cross-sectional	13	121,770	-.50	-.61	.09	[-.67, -.56]	[-.74, -.49]	
Longitudinal	3	614	-.27	-.32	.10	[-.57, -.08]	[-.44, -.21]	
Occupational turnover intention								.11 [.08, .29]
Cross-sectional	5	1 946	.28	.32	.14	[.15, .49]	[.12, .51]	
Longitudinal	2	425	.18	.21	.06	[-.30, .72]	[.21, .21]	
Organizational turnover intention								.15 [.08, .22]
Cross-sectional	138	219,756	.31	.40	.17	[.37, .43]	[.19, .61]	
Longitudinal	14	10,747	.21	.25	.12	[.18, .31]	[.10, .39]	
Willingness to participate in training	2							.07 [-.21, .37]
Cross-sectional	3	970	.05	.06	.13	[-.26, .29]	[-.15, .26]	
Longitudinal	2	4,424	-.02	-.02	.08	[-.70, .66]	[-.24, .20]	
Employability								.08 [-.08, .24]
Cross-sectional	61	91,663	-.12	-.15	.18	[-.20, -.11]	[-.38, .07]	
Longitudinal	3	3,598	-.20	-.23	.13	[-.57, .10]	[-.48, .01]	
Career-related behaviors								
Job search behaviors								.02 [-.17, .21]

(Contd.)

OUTCOME	<i>k</i>	<i>N</i>	$\bar{r}$	$\bar{\rho}$	<i>SD_{rc}</i>	95% CI	80% CR	DIFF [95% CI]
Cross-sectional	9	4,454	.27	.32	.08	[.26, .38]	[.23, .41]	
Longitudinal	5	5,554	.20	.30	.19	[.06, .53]	[.02, .58]	
Knowledge hiding								0.07 [−.24, .38]
Cross-sectional	9	2,908	.36	.41	.14	[.30, .52]	[.23, .59]	
Longitudinal	3	1,011	.30	.34	.23	[−.22, .91]	[−.07, .76]	
Proactive skill development								−0.09 [−.31, .13]
Cross-sectional	8	5 478	−.12	−.15	.11	[−.24, −.06]	[−.29, −.01]	
Longitudinal	5	3 917	−.05	−.06	.20	[−.31, .19]	[−.37, .25]	
Actual turnover								.15 [−.19, .50]
Cross-sectional	4	878	.21	.25	.27	[−.17, .67]	[−.17, .67]	
Longitudinal	5	2,028	.08	.10	.14	[−.08, .27]	[−.10, .29]	

Table 3 Moderator Results of Meta-analyses: Study Design (Cross-sectional, Longitudinal).

Note: *k* = number of studies contributing to meta-analysis; *N* = total sample size; $\bar{r}$ = mean observed correlation; $\bar{\rho}$ = mean true-score correlation; *SD_{rc}* = observed standard deviation of corrected correlations (*r_c*); CI = confidence interval around $\bar{\rho}$; CR = credibility interval around $\bar{\rho}$. Correlations corrected individually. **Bold** coefficients denote significant differences between sub-groups.

−.31], diff = 0.228, CI [.13, .33]), and combined measures ($\bar{\rho}$ = −.27, [−0.42, −.13], diff = −0.36, CI [−0.51, −.20]). For organizational turnover intentions, cognitive measures had a stronger positive association ($\bar{\rho}$ = .49, [.46, .51]) than affective ($\bar{\rho}$ = .23, [.20, .26], diff = −.25, CI [−.29, −.21]) and combined measures ($\bar{\rho}$ = .28, [.23, .33], diff = 0.20, CI [.15, .26]). In terms of employability, affective measures had a stronger negative association ($\bar{\rho}$ = −.27, [−.36, −.17]) than combined measures ($\bar{\rho}$ = −.14, [−.19, −.09], diff = −0.129, CI [−.20, −.06]). Cognitive measures were not significantly associated with employability. For the remaining variables where this moderator was possible to test (career commitment and career opportunity) the type of measure did not matter for the strength of the associations.

For *career-related behaviors*, we found significant differences across the types of job insecurity measure only for the association between job insecurity and knowledge hiding (*Q* = 88.64, *p* = .001), where combined measures had a stronger positive association ($\bar{\rho}$ = .42, [.30, .54]) than cognitive measures ($\bar{\rho}$ = .27, [.09, .45], diff = −0.153, CI [−.27, −.03]). There were no studies with affective measures. For the remaining career-related behaviors where it was possible to test effects of type of job insecurity measure (job search behaviors, proactive skill development and actual turnover) we did not find any significant differences.

DISCUSSION

The present study reported meta-analytic results of the relationship between job insecurity and career-related attitudinal and behavioral outcomes. We also tested whether the associations differed depending on two

methodological moderators—study design and type of job insecurity measure.

JOB INSECURITY AND CAREER-RELATED OUTCOMES: MAIN EFFECTS

A summary of the results is shown in Table 5. Among the career-related attitudinal outcomes associated with job insecurity, our results were largely in line with most previous research: we found that job insecurity was negatively related to career satisfaction, perceived career opportunities, and perceived employability. Job insecurity was positively related to both organizational and occupational turnover intentions.

Our findings regarding career satisfaction and employability are in line with previous meta-analytic results that provide evidence for job insecurity's negative relationship to job satisfaction (Cheng & Chan 2008; Sverke et al. 2002) and employability (Jiang et al. 2020). The negative associations between job insecurity and career satisfaction, perceived career opportunities and employability suggest that the impact of job insecurity may extend beyond the experience of the current job position, to broader qualities of individuals' careers such as lower satisfaction with the chosen career and fewer perceived career and employability prospects.

Our findings that job insecurity was positively related to both occupational and organizational turnover intentions match previous meta-analysis results (Jiang & Lavaysse 2018). These findings are in line with the reasoning that job insecurity may inspire re-evaluative coping behaviors; employees in insecure jobs want to leave these jobs, and turn their focus away from both the current insecure job and the employing organization (cf. Hobfoll et al. 2018). Some may even

OUTCOME	MAIN EFFECTS	MODERATOR EFFECTS	
	$\bar{\rho}$	DESIGN	MEASURE
Career-related attitudes			
Career commitment	-.16		
Career satisfaction	-.61	Cross-sectional stronger than Longitudinal	Cognitive stronger than Affective and Combined
Occupational turnover intention	.30	Cross-sectional stronger than Longitudinal	
Organizational turnover intention	.39	Cross-sectional stronger than Longitudinal	Cognitive stronger than Affective and Combined
Career opportunities	-.15		
Willingness to participate in training	-.00		
Employability	-.16		Affective stronger than Cognitive and Combined
Career-related behaviors			
Job search behaviors	.31		
Knowledge hiding	.39		Cognitive weaker than Combined
Knowledge sharing	.07		
Career planning	-.11		
Networking behavior	-.11		
Proactive skill development	-.11		
Actual turnover	.15		

Table 5 Results summary table.

consider changing occupations due to the uncertainty in the current occupation.

In terms of job insecurity's relationship with career-related behaviors, we found that job insecurity had positive associations with job search behaviors and knowledge hiding, and a negative association with proactive skill development. Job search behaviors may be considered a clear attempt towards direct resource replacement (Hobfoll 1989). Those more concerned about the future of their job may also re-evaluate its worth, and engage in coping behaviors (job search) that may replace this resource (in other words, secure a new job). The positive association between job insecurity and knowledge hiding is in line with findings from previous studies (Shoss et al. 2023; Zhang et al. 2022). Knowledge hiding may be perceived as a means of dealing with the threat of job insecurity if withholding such knowledge (preserving a resource) contributes to individuals' own careers. Ironically, the literature indicates that knowledge hiding holds negative outcomes for individuals (Siachou et al. 2021) which suggests potential for a negative spiral where the threat of job insecurity, met with knowledge hiding, over time may negatively affect resources such as positive work climate (if colleagues feel betrayed) or individual wellbeing (if knowledge hiding associates with guilt or shame).

The result indicating that job insecurity relates negatively to proactive skill development is in line with job insecurity being appraised as a threat. Skill development may be deemed as an ineffective strategy in a job that has become insecure—with such insecurity potentially extending to uncertainty regarding which skills would be necessary in the first place. Results from Koen and Parker (2020) suggest that whether skill development gets expressed through resource investment or resource conservation may depend on the nature of experienced job insecurity (i.e., chronic vs. acute).

In contrast, job search behaviors are actions directed at identifying alternative employment opportunities (that may be acted upon, or not, but can be exercised immediately), while proactive skill development does not necessarily take place with the current job as (exclusive) reference, but can be future-orientated (examples of item wording from the measure described by Strauss et al. (2012, p. 598) include 'future work life' and 'future positions'). Job search behaviors may be considered as more proximal to the experiencing of job insecurity, while skill development may be more distal. Koen and Parker (2020) noted the lack of distinction between immediate and long-term proactive career behaviors in the literature. Our results suggest that it would be useful to further explore the mechanisms linking job insecurity

to career-related behavioral outcomes, in combination with making a distinction between immediate and long-term behavioral reactions. Koen and Parker's (2020) findings also draw attention to distinguishing between chronic and acute job insecurity—with the suggestion that proactive coping behavior may be best suited to dealing with instances of acute job insecurity.

We have classified job insecurity's career-related outcomes using the categorization of attitudes and behaviors as proposed by Sverke et al. (2002). There, attitudes and behaviors were proposed to be affected in the short and long term, respectively, and this perspective is useful when considering the outcomes in the present study. For example, we found that job insecurity was negatively related to both employability and proactive skill development, which may be suggestive of a potential loss spiral: Individuals experiencing job insecurity in the short term perceive themselves as less employable. Failing to invest further resources in the longer term (i.e., proactive skill development), their employability is undermined further, and concomitantly, their job insecurity may increase. The investigation of such a spiral would be an interesting area for future longitudinal research to explore.

Similarly, it could also be argued that the higher levels of job search behaviors and organizational and occupational turnover intentions among those reporting higher job insecurity indicates a 'push' effect in that individuals feel forced to act, as opposed to a 'pull' effect, where individuals voluntarily initiate a change in jobs to advance the career. Combined with the negative associations between job insecurity and career satisfaction and career opportunities, these findings suggest that the push effect may extend even beyond the current job into the career.

There were, however, several instances where we did not find job insecurity to be significantly related with attitudinal (career commitment, willingness to participate in training) or behavioral outcomes (knowledge sharing, career planning, networking behaviors, and actual turnover). For most of these associations, few studies ($k = 10$ or fewer) had been conducted, potentially leading to low power to identify significant effects. It would be useful for future research to continue to explore these outcomes to achieve a larger body of evidence in order to re-examine these non-significant associations. Future primary research could also explore other variables that may affect the relationship between job insecurity and these outcomes, possibly moderating the relationship, which could explain why there was no main effect in the current study.

Overall, the pattern of our results is more in line with the re-evaluation hypothesis, where individuals re-appraise and devalue the threatened resource. It would also suggest that individuals experiencing job insecurity tend to appraise it as a threat in terms of career-related

outcomes beyond the current job. The lack of support for the reinterpretation hypothesis mirrors the noted lack of evidence in reviews and tests of job insecurity and job-related outcomes (De Witte & Van Hootegem 2021; Piccoli, Reisel, & De Witte 2021). A possible explanation for this finding comes from research showing that threat appraisals require both cognitive and emotional resources, whereas challenge appraisals relate only to cognitive resource depletion (Palmwood & McBride 2019). In line with COR, this would suggest that the appraisal of job insecurity as a threat consumes more resources—implying that fewer resources are available for responding. Rather, employees who experience job insecurity appear to devalue the career associated with the insecure job, or consider leaving the job, or even leaving the career.

In experiencing job insecurity, perceptions of employability and future career opportunities are also negatively affected, which undermines the individual agency noted as important for career behaviors in contemporary career theories (cf. De Vos et al. 2020; Hirshi & Koen 2021): Experiencing job insecurity is associated with lowered expectations regarding job and career futures. Job insecurity perceptions also appear to be related to further resource conservation behaviors in the current job, such as being less collaborative by hiding knowledge—a behavior that may potentially harm coworkers' careers if they do not get needed knowledge timeously. Where resources are invested, it is directed away from the current organization through searching for alternative employment, and not investing in skill development.

Taken together, these findings lend support to the conceiving of job insecurity as the start of a resource loss spiral for individuals and their careers. Firstly, the COR framework has led us to frame job insecurity as a perceived threat that consumes resources which may have been invested in mitigating the negative effects of such employment uncertainty through career-related attitudes and behaviors. Secondly, informing perspectives in career theory, where resources are invested, such resource investment is not necessarily aligned with the organization's interests.

METHODOLOGICAL MODERATORS

Two moderators were proposed based on previous research on how the associations between job insecurity and outcomes may differ between studies using different designs (cross-sectional or longitudinal) or different measures of job insecurity (affective, cognitive, or a combination of both).

Study design

The results of the moderator analyses showed that there was a stronger negative association between job insecurity and career satisfaction in cross-sectional studies. The same was true for occupational and

organizational turnover intentions, where there was a stronger positive association in cross-sectional studies. The reasons for the stronger cross-sectional correlation could be due to common method variance (cf. Podsakoff et al. 2012), but potentially also to the synchronous relationship being stronger since the association between these particular variables requires only a very short timeframe to develop (cf. Taris & Kompier 2014). It should be noted that the longitudinal association for both these outcome variables was still significant, only weaker. The current results are in line with previous findings with other outcomes of job insecurity, and suggest that the significant associations between job insecurity and the outcomes identified in the current study are reasonably robust regardless of study design.

Operationalization of job insecurity

For the moderator analyses comparing results from studies using affective, cognitive, or combined measures of job insecurity, the results showed that affective measures of job insecurity were more strongly negatively correlated with employability. The association between cognitive job insecurity and employability was not significant. These results may suggest that employability perceptions are more easily impacted by more emotive evaluations of the future of one's job (i.e., affective job insecurity). This finding is especially interesting since employability is deemed to represent a purely cognitive dimension (Van Hootegem et al. 2019), dealing with the probability of finding alternative employment in the future, and these results could indicate that the worry associated with affective job insecurity limits the proactive outlook that employability entails.

Cognitive measures returned a stronger average association for career satisfaction and organizational turnover intentions compared to affective or combined measures. The stronger negative association between cognitive job insecurity and turnover intentions is in line with the meta-analysis by Jiang and Lavaysse (2018) and may indicate that the perceived likelihood of job loss is more important than one's worry about job loss for inspiring thoughts about leaving the organization. The stronger negative association for career satisfaction may suggest that cognitive processes precede evaluations of prospects and one's satisfaction with these.

Knowledge hiding was more strongly related to job insecurity in studies using combined measures that included both affective and cognitive components, as compared to measures comprising only cognitive job insecurity. There were no studies available using measures of only affective job insecurity, but this result may still suggest that affective job insecurity could be important in studying the relationship between job insecurity and knowledge hiding, as the combination of measures had the strongest association. Stronger associations for combined measures were found for

a number of outcomes of job insecurity in the meta-analysis by Jiang and Lavaysse (2018), but they did not include knowledge hiding.

Most of the significant main-effect correlations were significant regardless of type of measure, but the magnitude varied. This may indicate that while the type of measure will yield slightly different results, the patterns of results will be similar regardless of scale used. This, in turn, may indicate that job insecurity is a higher-order construct that is reflected in both affective and cognitive dimensions, but perhaps to different extents (cf. Klug et al. 2024). Research that allows for a more in-depth comparison of the different types of measures and the structure of the underlying constructs, for example by using several types of scales in the same sample, would be useful to provide further insight into the implications of using different operationalizations of job insecurity.

LIMITATIONS

Although the meta-analysis technique is a robust and powerful tool for integrating and summarizing results from several individual studies, there are a number of potential sources of error that need to be addressed. An obvious limitation is that the literature search may have missed studies that should have been included in the meta-analysis. Different studies use different names and operationalizations of the variables, which may have meant that some studies were not identified if other variable names were used than those included in the search terms. However, our search terms were quite inclusive, making the risk of missing studies fairly low.

Another potential source of error is that we chose not to include unpublished studies, which may have inflated the corrected coefficients in our study, as it can be suspected that studies with significant results are published to a greater extent than studies with non-significant results, the so-called 'publication bias' (Schmidt & Hunter 2015). However, there are suggestions and empirical studies showing that this source of error may be negligible, since studies (e.g., Bellefontaine & Lee 2014; Dalton et al. 2012; Remus, Nahrgang, & Morgeson 2007) have shown that there are only small or no differences in the strength of relationships between studied variables in published as compared to unpublished studies. Further, we chose to include only peer-reviewed studies to ensure the quality of the data used as a basis for this meta-analysis.

Even though we theoretically argue that job insecurity is an antecedent of the career-related outcomes, the present study is limited in its possibility of supporting conclusions about the direction of the relationship between job insecurity and the various outcomes. Causal inferences are not supported by the current study design, as the meta-analysis only investigated bivariate relationships between the variables, which does not provide information about the temporal direction of the relationships. However, we have based our proposed

directionality on theoretical arguments as well as cross-lagged longitudinal studies and reviews (e.g., De Witte et al. 2016; Hellgren & Sverke 2003) that provide supporting evidence that job insecurity experiences precede various outcomes. We also examined the robustness of the associations by comparing the strength of associations in cross-sectional studies to those found in longitudinal studies, and in many cases the associations did not differ significantly, supporting job insecurity as a predictor of the outcomes in the current study.

RESEARCH AGENDA

While turnover intentions is a well-researched outcome of job insecurity (as evidenced by the 151 correlations included in the analysis), research on the remaining career-related outcomes in this meta-analysis is still scarce as evidenced by the relatively low ($k = 10$ or lower) number of correlations for several of the outcomes. Our results indicate that job insecurity potentially can interfere with attitudes and behaviors that support ongoing career development. Given the importance of continuous learning and competency development to the global labor market (Van Hooft et al. 2023; World Economic Forum 2023), it is imperative that more research should be conducted on such outcomes to understand what factors may prevent or mitigate the negative impact of job insecurity. Potentially, the career-related consequences of job insecurity may be prevented by some intervention in the current job. Organizations may play an important role here. For example, the intervention-based results of Westman et al. (2004) suggest that when employees experience job insecurity, there is an opportunity for the organization to step in and enhance resources in order to prevent resource loss spirals.

The moderator analysis comparing different operationalizations of job insecurity indicate that for several outcomes the associations differ depending on the type of measure used. This indicates that it is important to consider which type of measure to use when studying job insecurity in relation to these outcomes. However, for a number of outcomes the associations did not appear to differ depending on the type of measure, suggesting that either type of measure can be used and similar results obtained. To clarify this issue further, additional research building on Jiang and Lavaysse (2018), and testing the possible temporal precedence of cognitive job insecurity over affective job insecurity would be useful in better understanding how the types of job insecurity operationalizations are related.

As shown by the moderator analyses for study design, there is also a need for more longitudinal studies in this field of research. Evidence for the temporal direction of the relationships between job insecurity and a number of outcome variables is still lacking (Klug et al. 2020). While

theoretical arguments make a good case for job insecurity being a predictor in many cases, such arguments require further empirical testing and support. Research using longitudinal designs that allow for such relationships to be tested would be useful to further our understanding about the mechanisms linking job insecurity to career-related outcomes. We can only echo the calls from other researchers (Koen & Parker 2020; Urbanaviciute et al. 2024) regarding drawing the distinction between short- and long-term consequences of JI and particularly career-related outcomes. Where we did find evidence of a moderating effect, relationships were still present, albeit weaker over time.

Studies that examine the associations from both a between- and within-person perspective will be useful as this will enable the study of how changes in job insecurity relate to changes in outcome variables (cf. Doden et al. 2023). Much of the job insecurity research to date has focused on between-persons differences, but it is plausible that within-persons designs can add to our understanding of how job insecurity and its relation to career-related outcomes changes over time. Using more intensive longitudinal designs to explore whether there are meaningful differences at different levels of analysis would further contribute to our understanding of how job insecurity reactions develop over time. Such designs would also allow the investigation of the loss spirals which our results suggest may be related to job insecurity experiences.

Job loss—the potential conclusion of job insecurity—would present a negative career shock (Akkermans et al. 2018). In this study, we have argued that even the perceived threat of job loss, that is, acute job insecurity, can be a negative career shock in itself. COR theory suggests that the threat of resource loss, for instance, experienced job insecurity in anticipation of potential job loss, can be a source of individual stress. This experience of a ‘disruption’ or ‘threat to continuance’ is something that the definitions of job insecurity and career shocks have in common. Also, both definitions emphasize that the status quo is disrupted by events outside of the individuals’ control. What is different in their definitions is that career shocks would trigger thoughts specifically related to the career going forth, while job insecurity has consequences for attitudes and behaviors related both to the current job – and as reflected in our findings, also to careers. While job insecurity may not necessarily trigger deliberate career reflection, as suggested in the career shock definition; it may instead trigger emotional or behavioral responses. This is especially of relevance when the insecurity is prolonged or inherent to the nature of the job, as is the case when job insecurity is a chronic experience, for instance in precarious employment. In that context, and seen from the perspective of sustainable career theory, job insecurity is not solely an agentic issue but one shaped by contextual factors

and boundaries, which in turn influence the resources individuals have access to. In this study, COR theory has been applied here together with sustainable career theory to explain the mechanisms for how individuals' limited resources are invested as they strive to attain or regain a good person-career fit while experiencing job insecurity.

The timespan of the studies included in this meta-analysis is over 40 years. Over this period, working life and career paths have undergone large-scale transformations, related to technological advancements and changes in how and where work is done. The investigation of how technological changes relate to job insecurity perceptions and coping is an important area for future research. For example, the impact of remote and hybrid work on job insecurity reactions is an important area of investigation, as is the role of open artificial intelligence in changing how work is done and by whom.

CONCLUSION

This meta-analysis has shown that job insecurity is negatively related to several career-related attitudinal and behavioral outcomes. Job insecurity appears to inspire a pessimistic outlook on the future as well as a defensive approach, where individuals protect their resources, or invest resources aimed at leaving the current job rather than explore the proactive seeking out of new resources. Such an approach may have important negative consequences for individuals, their careers and organizations. Future research should continue to explore these outcomes in the context of the current technological changes at work.

ADDITIONAL FILE

The additional file for this article can be found as follows:

- **Appendix A.** List of studies included in the meta-analysis. DOI: <https://doi.org/10.16993/sjwop.275.s1>

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COMPETING INTERESTS

The authors have no competing interests to declare.

AUTHOR CONTRIBUTIONS

Conceptualization: L.L., J.P., K.N., A.R., J.H. and M.S.; Methodology and coding: L.L., J.P., K.N., A.R., J.H. and M.S.; Formal analysis: K.N.; Writing—original draft preparation: L.L., J.P., K.N., A.R., J.H. and M.S.

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REFERENCES

- Akkermans, J., Seibert, S. E., & Mol, S. T.** (2018). Tales of the unexpected: Integrating career shocks in the contemporary careers literature. *SA Journal of Industrial Psychology*, 44(1), 1–10. <https://doi.org/10.4102/sajip.v44i0.1503>
- Ali, M., Ali, I., Albort-Morant, G., & Leal-Rodríguez, A. L.** (2021). How do job insecurity and perceived well-being affect expatriate employees' willingness to share or hide knowledge? [Original Paper]. *International Entrepreneurship and Management Journal*, 17(1), 185–210. <https://doi.org/10.1007/s11365-020-00638-1>
- Ashford, S. J., Lee, C., & Bobko, P.** (1989). Content, cause, and consequences of job insecurity: A theory-based measure and substantive test. *Academy of Management Journal*, 32(4), 803–829. <https://doi.org/10.5465/256569>
- Bellefontaine, S. P., & Lee, C. M.** (2014). Between black and white: Examining grey literature in meta-analyses of psychological research. *Journal of Child and Family Studies*, 23, 1378–1388. <https://doi.org/10.1007/s10826-013-9795-1>
- Berglund, T., Hedenus, A., Håkansson, K., & Isidorsson, T.** (2021). Non-standard work in Sweden. In A. Ilsøe, T. P. Larsen, E. S. Bach, & S. Rasmussen (Eds.), *Non-standard work in the Nordics: Troubled waters under the still surface* (pp. 60–72). Nordic Council of Ministers.
- Berntson, E., & Marklund, S.** (2007). The relationship between perceived employability and subsequent health. *Work & Stress*, 21(3), 279–292. <https://doi.org/10.1080/02678370701659215>
- Borg, I., & Elizur, D.** (1992). Job insecurity: Correlates, moderators and measurement. *International Journal of Manpower*, 13(2), 13–26. <https://doi.org/10.1108/01437729210010210>

- Cheng, G. H. L., & Chan, D. K. S.** (2008). Who suffers more from job insecurity? A meta-analytic review. *Applied Psychology*, 57(2), 272–303. <https://doi.org/10.1111/j.1464-0597.2007.00312.x>
- Connelly, C. E., Zweig, D., Webster, J., & Trougakos, J. P.** (2012). Knowledge hiding in organizations. *Journal of Organizational Behavior*, 33(1), 64–88. <https://doi.org/10.1002/job.737>
- Dahlke, J. A., & Wiernik, B. M.** (2019). psychmeta: An R package for psychometric meta-analysis. *Applied Psychological Measurement*, 43(5), 415–416. <https://doi.org/10.1177/0146621618795933>
- Dalton, D. R., Aguinis, H., Dalton, C. M., Bosco, F. A., & Pierce, C. A.** (2012). Revisiting the file drawer problem in meta-analysis: An assessment of published and nonpublished correlation matrices. *Personnel Psychology*, 65(2), 221–249. <https://doi.org/10.1111/j.1744-6570.2012.01243.x>
- 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(6), 770–788. <https://doi.org/10.1002/job.1800>
- De Cuyper, N., Smet, K., & De Witte, H.** (2022). I should learn to feel secure but I don't because I feel insecure: The relationship between qualitative job insecurity and work-related learning in the public Sector. *Review of Public Personnel Administration*, 42(4), 760–785. <https://doi.org/10.1177/0734371x211032391>
- De Cuyper, N., Van Hootegem, A., Smet, K., Houben, E., & De Witte, H.** (2019). All insecure, all good? Job insecurity profiles in relation to career correlates. *International Journal of Environmental Research and Public Health*, 16(15), Article 2640. <https://doi.org/10.3390/ijerph16152640>
- De Vos, A., Van der Heijden, B. I., & Akkermans, J.** (2020). Sustainable careers: Towards a conceptual model. *Journal of Vocational Behavior*, 117, 103196. <https://doi.org/10.1016/j.jvb.2018.06.011>
- 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(2), 155–177. <https://doi.org/10.1080/135943299398302>
- De Witte, H.** (2016). On the scarring effects of job insecurity (and how they can be explained). *Scandinavian Journal of Work, Environment & Health*, 42(2), 99–102. <http://www.jstor.org/stable/43999205>. <https://doi.org/10.5271/sjweh.3545>
- De Witte, H., Pienaar, J., & De Cuyper, N.** (2016). Review of 30 years of longitudinal studies on the association between job insecurity and health and well-being: Is there causal evidence? *Australian Psychologist*, 51(1), 18–31. <https://doi.org/10.1111/ap.12176>
- De Witte, H., Vander Elst, T., & De Cuyper, N.** (2015). Job insecurity, health and well-being. In J. Vuori, R. Blonk, & R. H. Price (Eds.), *Sustainable working lives* (pp. 109–128). Springer. https://doi.org/10.1007/978-94-017-9798-6_7
- De Witte, H., & Van Hootegem, A.** (2021). Job insecurity: Challenge or hindrance stressor? Review of the evidence and empirical test on entrepreneurs. In Korunka, C. (Ed.), *Flexible working practices and approaches: Psychological and social implications of a multifaceted phenomenon* (pp. 213–229). Springer. https://doi.org/10.1007/978-3-030-74128-0_11
- Direnzo, M. S., & Greenhaus, J. H.** (2011). Job search and voluntary turnover in a boundaryless world: A control theory perspective. *Academy of Management Review*, 36(3), 567–589. <https://doi.org/10.5465/amr.2009.0333>
- Doden, W., Grosemans, I., De Cuyper, N., Tschopp, C., & Grote, G.** (2023). Employability in the post-job security era: Testing competing effects of perceived job insecurity on perceived employability change. *European Journal of Work and Organizational Psychology*, 33(1), 11–23. <https://doi.org/10.1080/1359432X.2023.2263201>
- Ferrie, J. E., Virtanen, M., Jokela, M., Madsen, I. E. H., Heikkilä, K., Alfredsson, L., Batty, G. D., Bjorner, J. B., Borritz, M., Burr, H., Dragano, N., Elovainio, M., Fransson, E. I., Knutsson, A., Koskenvuo, M., Koskinen, A., Kouvonen, A., Kumari, M., Nielsen, M. L., Nordin, M., Oksanen, T., Pakkin, K., Pejtersen, J. H., Pentti, J., Salo, P., Shipley, M. J., Suominen, S. B., Tabák, A., Theorell, T., Väänänen, A., Vahtera, J., Westerholm, P. J. M., Westerlund, H., Rugulies, R., Nyberg, S. T., & Kivimäki, M.** (2016). Job insecurity and risk of diabetes: A meta-analysis of individual participant data. *Canadian Medical Association Journal*, 188(17–18), E447–E455. <https://doi.org/10.1503/cmaj.150942>
- Giebe, C., & Rigotti, T.** (2020). A typological approach of perceived resource fluctuations after job transitions in a representative panel study. *European Journal of Work and Organizational Psychology*, 29(5), 764–775. <https://doi.org/10.1080/1359432X.2020.1756261>
- Greenhalgh, L., & Rosenblatt, Z.** (1984). Job insecurity: Toward conceptual clarity. *Academy of Management Review*, 9(3), 438–448. <https://doi.org/10.5465/amr.1984.4279673>
- Greenhaus, J. H., Callanan, G. A., & Godshalk, V. M.** (2019). *Career management for life*. Routledge. <https://doi.org/10.4324/9781315205991>
- Halbesleben, J. R. B., Neveu, J.-P., Paustian-Underdahl, S. C., & Westman, M.** (2014). Getting to the 'COR': Understanding the Role of Resources in Conservation of Resources Theory. *Journal of Management*, 40(5), 1334–1364. <https://doi.org/10.1177/0149206314527130>
- Hartley, J., Jacobson, D., Klandermans, B., & Van Vuuren, T.** (1991). *Job insecurity: Coping with jobs at risk*. London: Sage Publications Ltd.
- Heaney, C. A., Israel, B. A., & House, J. S.** (1994). Chronic job insecurity among automobile workers: Effects on job satisfaction and health. *Social Science & Medicine*, 38(10), 1431–1437. [https://doi.org/10.1016/0277-9536\(94\)90281-X](https://doi.org/10.1016/0277-9536(94)90281-X)

- Hellgren, J., & Sverke, M.** (2003). Does job insecurity lead to impaired well-being or vice versa? Estimation of cross-lagged effects using latent variable modelling. *Journal of Organizational Behavior*, 24(2), 215–236. <https://doi.org/10.1002/job.184>
- 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(2), 179–195. <https://doi.org/10.1080/135943299398311>
- Hirschi, A., & Koen, J.** (2021). Contemporary career orientations and career self-management: A review and integration. *Journal of Vocational Behavior*, 126, Article 103505. <https://doi.org/10.1016/j.jvb.2020.103505>
- Hobfoll, S. E.** (1989). Conservation of Resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037//0003-066x.44.3.513>
- Hobfoll S. E.** (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50(3), 337–369. <https://doi.org/10.1111/1464-0597.00062>
- Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M.** (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5(1), 103–128. <https://doi.org/10.1146/annurev-orgpsych-032117-104640>
- Hollywood, A., McCarthy, D., Spencely, C., & Winstone, N.** (2020). ‘Overwhelmed at first’: The experience of career development in early career academics. *Journal of Further and Higher Education*, 44(7), 998–1012. <https://doi.org/10.1080/0309877X.2019.1636213>
- Huang, G.-H., Lee, C., Ashford, S., Chen, Z., & Ren, X.** (2010). Affective job insecurity: A mediator of cognitive job insecurity and employee outcomes relationships. *International Studies of Management & Organization*, 40(1), 20–39. <https://doi.org/10.2753/IMO0020-8825400102>
- Huang, G.-h., Niu, X., Lee, C., & Ashford, S. J.** (2012). Differentiating cognitive and affective job insecurity: Antecedents and outcomes. *Journal of Organizational Behavior*, 33(6), 752–769. <https://doi.org/10.1002/job.1815>
- Huang, G. h., Zhang, Y., Zhang, X., & Long, L.** (2021). Job insecurity, commitment and proactivity towards the organization and one's career: Age as a condition. *Human Resource Management Journal*, 31(2), 532–552. <https://doi.org/10.1111/1748-8583.12322>
- Hur, H.** (2022). Job security matters: A systematic review and meta-analysis of the relationship between job security and work attitudes. *Journal of Management & Organization*, 28(5), 925–955. <https://doi.org/10.1017/jmo.2019.3>
- ILO.** (2022). *World employment and social outlook – Trends 2022*. https://www.ilo.org/global/research/global-reports/weso/trends2022/WCMS_834081/lang—en/index.htm
- Jiang, L., & Lavaysse, L. M.** (2018). Cognitive and affective job insecurity: A meta-analysis and a primary study. *Journal of Management*, 44(6), 2307–2342. <https://doi.org/10.1177/0149206318773853>
- Jiang, L., Xu, X., & Wang, H.-J.** (2020). A resources–demands approach to sources of job insecurity: A multilevel meta-analytic investigation. *Journal of Occupational Health Psychology*, 26(2), 108–126. <https://doi.org/10.1037/ocp0000267>
- Kalleberg, A. L.** (2009). Precarious work, insecure workers: Employment relations in transition. *American Sociological Review*, 74(1), 1–22. <https://doi.org/10.1177/000312240907400101>
- Kim, M., Shin, Y., & Kim, B.-S.** (2021). Team insecurity as a multi-level and multi-dimensional construct: Scale development and validation. *Current Psychology*, 40(3), 997–1014. <https://doi.org/10.1007/s12144-020-01025-3>
- 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, Article 985. <https://doi.org/10.1186/s12889-015-2313-1>
- Klehe, U.-C., Zikic, J., van Vianen, A. E. M., Koen, J., & Buyken, M.** (2012). Coping proactively with economic stress: Career adaptability in the face of job insecurity, job loss, unemployment, and underemployment. In P. L. Perrewé, J. R. B. Halbesleben, & C. C. Rosen (Eds.), *The role of the economic crisis on occupational stress and well being* (pp. 131–176). Emerald Group Publishing Limited. [https://doi.org/10.1108/S1479-3555\(2012\)0000010008](https://doi.org/10.1108/S1479-3555(2012)0000010008)
- Klug, K., Bernhard-Oettel, C., Selenko, E., & Sverke, M.** (2020). Temporal and person-oriented perspectives on job insecurity. In Y. Griep, S. Hansen, J. Hofmans, & T. Vantilborgh (Eds.), *Handbook on the temporal dynamics of organizational behavior* (pp. 91–104). Edward Elgar. <https://doi.org/10.4337/9781788974387.00015>
- Klug, K., Selenko, E., van Hootegem, A., Sverke, M., & De Witte, H.** (2024). A lead article to go deeper and broader in job insecurity research: Understanding an individual perception in its social and political context. *Applied psychology: An international review*, 1–34. <https://doi.org/10.1111/apps.12535>
- Koen, J., & Parker, S. K.** (2020). In the eye of the beholder: How proactive coping alters perceptions of insecurity. *Journal of Occupational Health and Psychology*, 25(6), 385–400. <https://doi.org/10.1037/ocp0000198>
- Lang, J., Ochsmann, E., Kraus, T., & Lang, J. W. B.** (2012). Psychosocial work stressors as antecedents of musculoskeletal problems: A systematic review and meta-analysis of stability-adjusted longitudinal studies. *Soc Sci Med*, 75(7), 1163–1174. <https://doi.org/10.1016/j.socscimed.2012.04.015>

- Lee, C., Huang, G. H., & Ashford, S. J.** (2018). Job insecurity and the changing workplace: Recent developments and the future trends in job insecurity research. In F. Morgeson (Ed.), *Annual review of organizational psychology and organizational behavior* (Vol. 5, pp. 335–359). <https://doi.org/10.1146/annurev-orgpsych-032117-104651>
- Lin, Y.-C.** (2015). Are you a protean talent? The influence of protean career attitude, learning-goal orientation and perceived internal and external employability. *Career Development International*, 20(7), 753–772. <https://doi.org/10.1108/CDI-04-2015-0056>
- Llosa, J. A., Menéndez-Espina, S., Agulló-Tomás, E., & Rodríguez-Suárez, J.** (2018). Job insecurity and mental health: A meta-analytical review of the consequences of precarious work in clinical disorders. *Anales de Psicología*, 34(2), 211–223. <https://doi.org/10.6018/analesps.34.2.281651>
- 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(3), 295–314. <https://doi.org/10.1348/096317902320369721>
- Nabi, G. R.** (2000). Motivational attributes and organizational experiences as predictors of career-enhancing strategies. *Career Development International*, 5(2), 91–98. <https://doi.org/10.1108/13620430010318963>
- Ng, T. W. H., & Feldman, D. C.** (2014). Subjective career success: A meta-analytic review. *Journal of Vocational Behavior*, 85(2), 169–179. <https://doi.org/10.1016/j.jvb.2014.06.001>
- Palmwood, E. N., & McBride, C. A.** (2019). Challenge vs. threat: The effect of appraisal type on resource depletion. *Current Psychology*, 38, 1522–1529. <https://doi.org/10.1007/s12144-017-9713-6>
- Piccoli, B., Reisel, W. D., & De Witte, H.** (2021). Understanding the relationship between job insecurity and performance: Hindrance or challenge effect? *Journal of Career Development*, 48(2), 150–165. <https://doi.org/10.1177/0894845319833189>
- Pienaar, J., De Witte, H., Hellgren, J., & Sverke, M.** (2013). The cognitive/affective distinction of job insecurity: Validation and differential relations. *Southern African Business Review*, 17(2), 1–22.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P.** (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63(1), 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Probst, T. M.** (2003). Development and validation of the Job Security Index and the Job Security Satisfaction scale: A classical test theory and IRT approach. *Journal of Occupational and Organizational Psychology*, 76(4), 451–467. <https://doi.org/10.1348/096317903322591587>
- Reilly, A. H., Brett, J. M., & Stroh, L. K.** (1993). The impact of corporate turbulence on: Managers' attitudes. *Strategic Management Journal*, 14(S1), 167–179. <https://doi.org/10.1002/smj.4250140913>
- Reisel, W. D., & Banai, M.** (2002). Job insecurity revisited: Reformulating with affect. *Journal of Behavioral and Applied Management*, 4(1), 87–91.
- Remus, I., Nahrgang, J. D., & Morgeson, F. P.** (2007). Leader-Member exchange and citizenship behaviors: A meta-analysis. *Journal of Psychology*, 92(1), 269–277. <https://doi.org/10.1037/0021-9010.92.1.269>
- Rudolph, C. W., Chang, C. K., Rauvola, R. S., & Zacher, H.** (2020). Meta-analysis in vocational behavior: A systematic review and recommendations for best practices. *Journal of Vocational Behavior*, 118, Article 103397. <https://doi.org/10.1016/j.jvb.2020.103397>
- Sanders, J., Oomens, S., Blonk, R. W. B., & Hazelzet, A.** (2011). Explaining lower educated workers' training intentions. *Journal of Workplace Learning*, 23(6), 402–416. <https://doi.org/10.1108/13665621111154412>
- Schmidt, F. L., & Hunter, J. E.** (2015). *Methods of meta-analysis: Correcting error and bias in research findings* (3rd ed.). Sage publications, Ltd. <https://doi.org/10.4135/9781483398105>
- Seibert, S. E., Kraimer, M. L., Holtom, B. C., & Pierotti, A. J.** (2013). Even the best laid plans sometimes go askew: Career self-management processes, career shocks, and the decision to pursue graduate education. *Journal of Applied Psychology*, 98(1), 169–182. <https://doi.org/10.1037/a0030882>
- Selenko, E., Mäkikangas, A., & Stride, C. B.** (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), 856–875. <https://doi.org/10.1002/job.2172>
- Shamsudin, F. M., Al-Badi, S. H., Bachkurov, A., & Alshuaibi, A. S.** (2016). Perceived career-related practices and knowledge sharing behaviour: A preliminary study in Oman. *Asian Academy of Management Journal*, 21(1), 25–47. <https://doi.org/10.21315/aamj2016.21.suppl.2>
- Shoss, M. K.** (2017). Job insecurity: An integrative review and agenda for future research. *Journal of Management*, 43(6), 1911–1939. <https://doi.org/10.1177/0149206317691574>
- Shoss, M. K., Brummel, B. J., Probst, T. M., & Jiang, L.** (2020). The joint importance of secure and satisfying work: Insights from three studies. *Journal of Business and Psychology*, 35(3), 297–316. <https://doi.org/10.1007/s10869-019-09627-w>
- Shoss, M. K., Su, S., Schlotzhauer, A. E., & Carusone, N.** (2023). Working hard or hardly working? An examination of job preservation responses to job insecurity. *Journal of Management*, 49(7), 2387–2414. <https://doi.org/10.1177/01492063221107877>
- Siachou, E., Trichina, E., Papasolomou, I., & Sakka, G.** (2021). Why do employees hide their knowledge and what are the consequences? A systematic literature review. *Journal of Business Research*, 135, 195–213. <https://doi.org/10.1016/j.jbusres.2021.06.031>

- Spector, P. E.** (2019). Do not cross me: Optimizing the use of cross-sectional designs. *Journal of Business and Psychology*, 34(2), 125–137. <https://doi.org/10.1007/s10869-018-09613-8>
- Strauss, K., Griffin, M. A., & Parker, S. K.** (2012). Future work selves: How salient hoped-for identities motivate proactive career behaviors. *Journal of Applied Psychology*, 97(3), 580–598. <https://doi.org/10.1037/a0026423>
- Sulistawati, J., Moslehpour, M., Diana, F., & Lin, P.-K.** (2022). Why and when do employees hide their knowledge? *Behavioral Sciences*, 12(12), 56. <https://doi.org/10.3390/bs12020056>
- Sverke, M., Hellgren, J., & Näswall, K.** (2002). No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health and Psychology*, 7(3), 242–264. <https://doi.org/10.1037/1076-8998.7.3.242>
- Sverke, M., Låstad, L., Hellgren, J., Richter, A., & Näswall, K.** (2019). A meta-analysis of job insecurity and employee performance: Testing temporal aspects, rating source, welfare regime, and union density as moderators. *International Journal of Environmental Research and Public Health*, 16(14), Article 2536. <https://doi.org/10.3390/ijerph16142536>
- Taris, T. W., & Kompier, M. A. J.** (2014). Cause and effect: Optimizing the designs of longitudinal studies in occupational health psychology. *Work & Stress*, 28(1), 1–8. <https://doi.org/10.1080/02678373.2014.878494>
- Urbanaviciute, I., Massoudi, K., & De Witte, H.** (2024). Job insecurity and (un)sustainable well-being: unravelling the dynamics of work, career, and life outcomes from a within-person perspective. *European Journal of Work and Organizational Psychology*, 33(5), 658–670. <https://doi.org/10.1080/1359432X.2024.2370666>
- van Harten, J., de Cuyper, N., Knies, E., & Forrier, A.** (2021). Taking the temperature of employability research: a systematic review of interrelationships across and within conceptual strands. *European Journal of Work and Organizational Psychology*, 31(1), 145–159. <https://doi.org/10.1080/1359432X.2021.1942847>
- Van Hootegem, A., De Witte, H., De Cuyper, N., & Elst, T. V.** (2019). Job insecurity and the willingness to undertake training: The moderating role of perceived employability. *Journal of Career Development*, 46(4), 395–409. <https://doi.org/10.1177/0894845318763893>
- Van Hootegem, A., Grosemans, I., & De Witte, H.** (2023). Trajectories of employees' learning intentions and training opportunities in relation to job insecurity and psychological contract breach. *European Journal of Work and Organizational Psychology*, 32(5), 645–661. <https://doi.org/10.1080/1359432X.2023.2214317>
- 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(3), 364–380. <https://doi.org/10.1080/1359432X.2012.745989>
- Vanhercke, D., De Cuyper, N., Peeters, E., & De Witte, H.** (2014). Defining perceived employability: A psychological approach. *Personnel Review*, 43(4), 592–605. <https://doi.org/10.1108/pr-07-2012-0110>
- van Vuuren, C. V., & Klandermans, P. G.** (1990). Individual reactions to job insecurity: An integrated model. In P. J. D. Drenth, J. A. Sergeant, & R. J. Takens (Eds.), *European perspectives in psychology*, Vol. 3. *Work and organizational, social and economic, cross-cultural* (pp. 133–146). John Wiley & Sons.
- Wang, S., & Noe, R. A.** (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, 20(2), 115–131. <https://doi.org/10.1016/j.hrmr.2009.10.001>
- Westman, M., Hobfoll, S. E., Chen, S., Davidson, O. B., & Laski, S.** (2004). Organizational stress through the lens of conservation of resources (COR) theory. In *Exploring interpersonal dynamics* (Vol. 4, pp. 167–220). Emerald Group Publishing Limited. [https://doi.org/10.1016/S1479-3555\(04\)04005-3](https://doi.org/10.1016/S1479-3555(04)04005-3)
- Wong, K. F. E., & Cheng, C.** (2020). The turnover intention-behaviour link: A culture-moderated meta-analysis. *Journal of Management Studies*, 57(6), 1174–1216. <https://doi.org/10.1111/joms.12520>
- World Economic Forum.** (2023). *Future of Jobs Report 2023* (Insight report May 2023). World Economic Forum. https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf
- Xie, M., Wang, G., Wu, Y. J., & Shi, H.** (2023). How does organizational career management benefit employees? The impact of the 'enabling' and 'energizing' paths of organizational career management on employability and job burnout. *International Journal of Environmental Research and Public Health*, 20(2), Article 1259. <https://doi.org/10.3390/ijerph20021259>
- Zhang, C., Hirschi, A., Herrmann, A., Wei, J., & Zhang, J.** (2015). Self-directed career attitude as predictor of career and life satisfaction in Chinese employees: Calling as mediator and job insecurity as moderator. *Career Development International*, 20(7), 703–716. <https://doi.org/10.1108/CDI-06-2015-0090>
- Zhang, X., Yao, Z., Qunchao, W., & Tsai, F.-S.** (2022). Every coin has two sides: The impact of time pressure on employees' knowledge hiding. *Journal of Knowledge Management*, 26(8), 2084–2106. <https://doi.org/10.1108/JKM-02-2021-0149>
- Zhu, D., Kim, P. B., Milne, S., & Park, I.-J.** (2021). A meta-analysis of the antecedents of career commitment. *Journal of Career Assessment*, 29(3), 502–524. <https://doi.org/10.1177/1069072720956983>

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