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Job Insecurity and the Changing Workplace: Recent Developments and the Future Trends in Job Insecurity Research

Cynthia Lee,[1] Guo-Hua Huang,[2] and Susan J. Ashford[3]

[1]Management and Organizational Development, D'Amore-McKim School of Business, Northeastern University, Boston, Massachusetts 02115, USA; email: c.lee@northeastern.edu

[2]Department of Management, Hong Kong Baptist University, Kowloon Tong, People's Republic of China, Hong Kong; email: mnhgh@hkbu.edu.hk

[3]Department of Management and Organizations, Ross School of Business, University of Michigan, Ann Arbor, Michigan 48109, USA; email: sja@umich.edu

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Keywords

job insecurity, job loss, job change, job stress, workplace uncertainty

Abstract

This article updates our understanding of the field of job insecurity (JI) by incorporating studies across the globe since 2003, analyzes what we know, and offers ideas on how to move forward. We begin by reviewing the conceptualization and operationalization of job insecurity. We then review empirical studies of the antecedents, consequences, and moderators of JI effects, as well as the various theoretical perspectives used to explain the relationship of JI to various outcomes. Our analyses also consider JI research in different regions of the world, highlighting the cross-cultural differences. We conclude by identifying areas in need of future research. We propose that JI is and will continue to be a predominant employment issue, such that research into it will only increase in importance and relevance. In particular, we call for in-depth research that carefully considers the rapid changes in the workplace today and in the future.

INTRODUCTION

Organizations across the globe face increasing threats, changes, and challenges, such that the corporations that have been the primary source of jobs and careers are on the decline (Davis 2013). Work is being sent offshore; automation, including robots that can do the jobs of humans more efficiently, is on the rise; and technological changes more generally are making many familiar jobs obsolete. As former President Barack Obama, in his last speech in office, warned, "The next wave of economic dislocations will not come from overseas. It will come from the relentless pace of automation that makes a lot of good, middle-class jobs obsolete" (Miller 2017). Both less-skilled occupations (e.g., drivers, security personnel, cleaners) and their highly skilled counterparts (e.g., lawyers, physicians, analysts, and managers) are increasingly vulnerable to job loss (Colvin 2015). For example, the use of transponders eliminates toll booth operators' jobs, barcode readers make cashier positions redundant, and online shopping, which contributes to the closing of many department stores that no longer require in-store salesclerks. Thus, McKinsey & Company estimates that "Currently demonstrated technologies could automate 45% of the activities people are paid to perform and that about 60% of all occupations could see 30% or more of their constituent activities automated, again with technologies available today" (Chui et al. 2017, **http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/where-machines-could-replace-humans-and-where-they-cant-yet**). Given these trends, together with the rise of the sharing economy in which individual workers bid for tasks (e.g., Uber, TaskRabbit) and contract their labor to various companies and clients, JI is and will continue to be a prominent feature in most workers' lives.

Defining JI as a "perceived powerlessness to maintain desired continuity in a threatened job situation" (Greenhalgh & Rosenblatt 1984, p. 438), early research focused on the construct itself, along with the antecedents and consequences of JI, as summarized in several reviews (e.g., Cheng & Chan 2008, de Witte 2005, Huang et al. 2012b, Keim et al. 2014, Sverke et al. 2002). In reviewing 72 studies published between the 1980s and 1999, including 86 independent samples that represented 38,531 individual responses, Sverke et al. (2002) show that JI has detrimental consequences for employees' job satisfaction, job involvement, organizational commitment, trust, turnover intentions, and health. Cheng & Chan's (2008) meta-analysis covers 1980–2006, with 133 studies providing 172 independent samples, and it largely replicates Sverke et al.'s results but indicates even stronger relationships of JI with job involvement and performance. They also find that organizational tenure and age affect the relationship between JI and its job- and health-related consequences. With their recent meta-analysis of 68 studies of predictors of JI, published between 1980 and 2012, Keim et al. (2014) reveal that JI is associated with the locus of control, role ambiguity, role conflict, organizational communication, organizational change, age, job type (white versus blue collar), and employment type (permanent versus temporary). These relationships between various individual predictors and JI also are moderated by unemployment rates, countries of origin, and the JI measure used.

In this review, we seek to provide an updated assessment of findings, published since 2003, by empirical studies conducted across the globe. We review empirical studies of the antecedents, consequences, and moderators of JI effects, and then consider the various theoretical perspectives used to explain the relationship of JI to various outcomes. Our rich analyses also highlight cross-cultural research. Accordingly, we derive trends and areas in need of further research in the final section. Our review follows the outline shown in **Figure 1**.
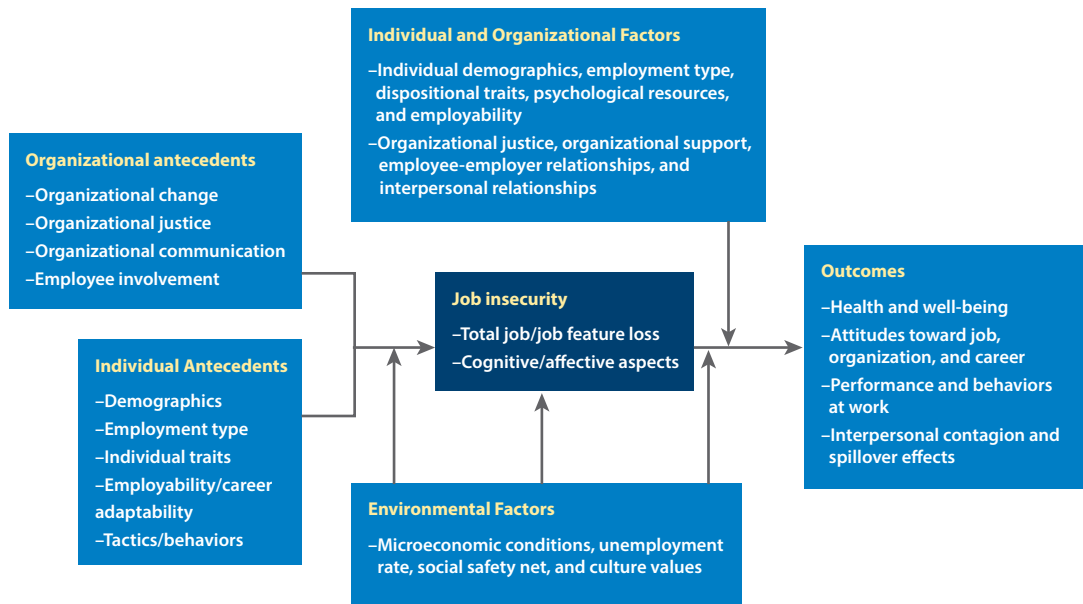
Figure 1

A model of antecedents and outcomes of job insecurity.

JOB INSECURITY: CONCEPTUALIZATIONS AND OPERATIONALIZATIONS

In clarifying Greenhalgh & Rosenblatt's (1984, p. 438) early definition of job insecurity, scholars highlight "the perception of a potential threat to continuity in his or her current job" (Heaney et al. 1994, p. 1431) and an "overall concern about the future existence of the job" (Rosenblatt & Ruvio 1996, p. 587). The commonalities in such definitions emphasize that JI is a unique type of stressor, distinct from related constructs, such as unemployment, job mobility, or other workplace stressors. First, it refers to an existing job situation, not previous or future jobs or a person's overall career. Because it is specific to the current employer, it depends on unique supervisory and organizational contexts, as well as macrolevel social and economic factors. As we discuss in the next section, substantial evidence shows that contextual factors, such as organizational change or the overall unemployment situation, affect JI (Ashford et al. 1989, Keim et al. 2014, Sverke et al. 2002).

Second, even though by definition JI is influenced by the environment, it is a subjective perception (Ashford et al. 1989, Greenhalgh & Rosenblatt 1984, Hartley et al. 1990, Sverke et al. 2002) that reflects the degree to which employees consider their jobs to be threatened. Prior research shows that JI is a nearly universal organizational phenomenon that does not necessarily involve dramatic organizational changes, such as restructuring or downsizing. Even in the same seemingly objective environment, individual employees experience different levels of JI (Huang et al. 2017, Lee et al. 2006).

Third, uncertainty about the future characterizes this subjective and perceptual phenomenon. Most definitions suggest or imply that the experience of JI is involuntary and invokes an unwanted feeling of powerlessness or lack of control. In this sense, JI is distinct from actual job loss because the people who suffer from it are still employed, but the future existence of their job is uncertain (Huang et al. 2013). It is also distinct from specific job stressors, such as work demands, time pressure, or

interpersonal conflict, as the clarity of these problems leave people with a better sense of what to do to resolve them. Anticipating a future involuntary event (job loss), like waiting for the other shoe to drop, instead is a chronically stressful situation that could have even more serious detriments than actual job loss. In a field experiment, Dekker & Schaufeli (1995) find that workers insecure about their jobs express lower well-being than their counterparts whose dismissal had been confirmed. The insecure group did not know what to do given their uncertain job situation; the certain job loss group was able to focus on moving ahead and finding another job. In a study of downsizing victims and survivors, Paulsen et al. (2005) note that employees' perceptions of job uncertainty are highest during the anticipation stage, relative to the implementation or postdownsizing stage.

Despite these commonalities across the various definitions of JI, prior literature lacks a total consensus. No single definition, measure, or perspective has been accepted as the best or most appropriate. In particular, conceptualizations of JI differ in two major respects, which has prompted multiplicity in the available JI instruments. First, JI has been conceptualized as both a unidimensional and a multidimensional construct (Sverke et al. 2002). Scholars who adopt the unidimensional or global form focus on insecurity as a perception about job loss include De Witte 2000, Johnson et al. 1984, Oldham et al. 1986, and Probst 2003. Scholars who treat JI as a multidimensional construct instead address not just job loss but also the loss of desired job features, such as location, pay, or opportunities for development (e.g., Ashford et al. 1989, Hellgren et al. 1999, Lee et al. 2006). Greenhalgh & Rosenblatt (1984) argue that a simple global measure cannot adequately reflect the multifaceted reality of JI, so they propose including changes in the features of a job in definitions of a broad JI concept, along with a sense of powerlessness to counteract threats to jobs and their features. Ashford et al. (1989) in turn propose a JI scale that combines five components: the importance of the total job, the likelihood of total job loss, the importance of various job features, the likelihood of losing job features, and perceived powerlessness to prevent the loss. Similarly, Hellgren et al. (1999) define quantitative JI as the threat to the continuity of the job itself, whereas qualitative JI is the threat to the continuity of important job features, such that JI is the total of both dimensions.

Second, the various definitions of JI distinguish cognitive from affective elements (Borg & Elizur 1992; Huang et al. 2010, 2012a; Probst 2003; Reisel & Banai 2002). Cognitive JI refers to the perception of the likelihood of negative changes to the job. Affective JI reflects an experience such as being concerned, worried, or extremely anxious about losing the job or job features (Huang et al. 2010).

These conceptualizations in turn have generated various measurement instruments for JI (Huang et al. 2010), and this trend continues to this day. In our review of empirical research since 2003, we find that the 130 studies covered have adopted 11 different measures. Moreover, ten studies use a single-item measure, asking if respondents perceive their jobs as (in)secure (e.g., Debus et al. 2012, Jiang & Probst 2016), and eight studies rely on self-developed scales (e.g., Fried et al. 2003)—two practices out of step with current measurement standards. In addition, we do not find any dominant scale for measuring JI, although several measures are notable. We summarize the existing operationalization of JI in **Table 1**, which is adapted from Huang et al. (2012b). As shown in the table, the most frequently adopted measures are De Witte's (2000) four-item scale, which appears in 46 studies conducted in Europe and 1 conducted in Asia (Chiu et al. 2015), along with Hellgren et al.'s (1999) scale, which has been adopted, in whole or in part, by 15 studies conducted mostly in Europe but also in North America and Asia. Both of these measures lump together the affective and cognitive experiences of job insecurity, as well as the subsequently differentiated concepts of job loss insecurity (quantitative JI) and job feature insecurity (qualitative JI). Such agglomeration is at odds with the accumulated evidence that shows, for example, that cognitive and affective JI measures capture different domains of the complex phenomenon and

Table 1 Measures of job insecurity, adapted from Huang et al. (2012b)

Scale	Sample for scale development	Conceptualization (global/multidimensional)	Conceptualization (cognitive/ affective)	Number of items	Number of studies using the scale since 2003
Caplan et al. (1975)	United States	Global	Cognitive	4	11
Johnson et al. (1984)	United States	Global	Affective	7	2
Oldham et al. (1986)	United States	Global	Cognitive	10	9
Ashford et al. (1989)	United States	Multidimensional	Cognitive	60 items (5 subscales, multiplicative)	14
Borg & Elizur (1992)	Multinational sample from Europe	Global	Cognitive and affective	7 (4 items for cognitive JI fear and 3 for affective JI worry)	9
Kuhnert & Vance (1992)	United States	Global (job security and employment security)	Cognitive and affective	18	2
Hellgren et al. (1999)	Sweden	Multidimensional	Cognitive and affective	7 (3 items for quantitative JI and 4 for qualitative JI)	15
De Witte (2000)	Netherlands	Global	Cognitive and affective	4 (2 items for cognitive JI and 2 for affective JI)	47
Probst (2003)	United States	Global	Cognitive and affective	38 (18 items for JI perception and 20 for JI satisfaction)	8
Sverke et al. (2004)	Multinational sample from Europe	Global	Cognitive and affective	5	2
Huang et al. (2010, 2012a)	China	Global	Affective	10	3

thus relate differently to antecedent and outcome variables (Borg & Elizur 1992; Huang et al. 2010, 2012a; Ito & Brotheridge 2007; König & Staufenbiel 2006).

Ashford et al.'s (1989) composite measure, or its subdimensions, appears in 14 studies conducted in various locales (e.g., Boswell et al. 2014; Huang et al. 2010; Lee et al. 2006, 2008). This scale was an attempt to create a theory-based measure of JI, based mainly on Greenhalgh & Rosenblatt's theory. Yet this unwieldy measure is too long to be practical (prompting an empirical test of a shortened measure by Lee et al. 2008), and it has been criticized for incorporating theorized multiplication (e.g., perceived probability of job loss × importance of the job to the person) into the measure, rather than testing for it explicitly (cf. Lee et al. 2006). Some researchers suggest it is not necessary to include the powerlessness (Jacobson 1991, Johnson et al. 1992, Rosenblatt & Ruvio 1996) or job features (Kinnunen et al. 2000) subscales to measure job insecurity. However, in their examination of the usefulness of these scale components in studies in the United States and China, Lee et al. (2006) argue that the call to eliminate the powerlessness and job features subscales is premature.

Caplan et al.'s (1975) measure of the amount of certainty a person has about his or her future job and career security has been adopted by 11 studies (e.g., Lu et al. 2014, Mauno & Kinnunen 2002, Wang et al. 2015). Borg & Elizur's (1992) global measure of the cognitive and affective aspects of JI informs nine studies, conducted mostly in Europe. Probst (2003) also combines items across two dimensions, JI perception and JI satisfaction; eight studies, conducted in different geographic areas, have adopted their scale. Nine studies rely on Oldham et al.'s (1986) scale, which was developed as a measure of job security perception, to measure cognitive aspects of JI (e.g., Huang et al. 2017, Lam et al. 2015). Finally, Huang et al.'s (2010, 2012a) affective JI scale informs studies that emphasize the affective experience of JI.

This variety in measurement is not good for this (or any) literature stream. It suggests the need for studies that examine the equivalence and utility of these various measures for examining JI in a nomological network. Prior meta-analyses confirm that the type of JI measures used influences the results (Sverke et al. 2002), so researchers must choose their instruments carefully, according to their conceptual arguments and research design, and justify the relevance of any measure they choose. This level of care is not very evident in extant literature. For example, the cognitive versus affective JI (Huang et al. 2010, 2012a) and the quantitative versus qualitative JI (Hellgren et al. 1999) distinctions have been well established, yet many studies use these scales without discussing why they adopt certain measures or what makes it appropriate to aggregate measures across these theoretical dimensions to form an overall measure of JI.

JOB INSECURITY: ANTECEDENTS, CONSEQUENCES, AND MODERATORS

Antecedents

Compared with research on the outcomes of JI, less effort has been devoted to studying the antecedents of JI. Because it is a perceptual phenomenon, JI should result from both contextual and individual factors. In their review, Sverke & Hellgren (2002) call for research into how JI develops in an effort to understand and manage its impact. They suggest that environmental factors, such as labor market characteristics, economic fluctuations, organizational change, and employment contracts, are potential candidates because they interact with employees' individual characteristics (e.g., employability, family responsibilities, individual differences). Since their review, research on JI antecedents has continued to expand, and a more recent meta-analysis confirms a long list of JI antecedents, including both objective situational variables (e.g., organizational change) and subjective characteristics of the individual (e.g., locus of control) (Keim et al. 2014). We thus focus on recent findings pertaining to how both organizational- and individual-level factors affect JI.

Although microeconomic and social environments can influence how people perceive job security levels (e.g., Otto et al. 2016), research on the contextual antecedents of JI tends to highlight organizational factors as the conceptualization of JI refers to a specific position in a specific organization. Several organizational practices and conditions can influence employees' sense of insecurity, such as anticipation of organizational downsizing or similar major changes (Ito & Brotheridge 2007, Paulsen et al. 2005). Perceptions of a lack of procedural justice (Loi et al. 2012) or violations of the psychological contract with employees (Bernhard-Oettel et al. 2013, Callea et al. 2016) also increase JI. Loi et al. (2012) identify an interesting three-way interaction effect, such that procedural justice interacts with ethical leadership to reduce employee JI, and the effect is even stronger among employees with a low power distance orientation, those who accept the unequal distribution of power in institutions and organizations (Farh et al. 2007).

In contrast, several organizational practices help mitigate JI. For example, Vander Elst et al. (2010) find in a large sample, cross-sectional study that organizational communication and

participation relate negatively to job insecurity. Similarly, Huang et al. (2012a) reveal that employment involvement practices, such as sharing information about organizational and group goals or including employees in decision-making and problem-solving endeavors, increases employees' perceptions of control and thus can reduce JI perceptions. Smet et al. (2016), using a within-person analysis, confirm that rumors among employees explain the reciprocal relationship between perceived organizational change communication and job insecurity.

Individual characteristics, conditions, and resources also contribute to employees' sense of (in)security. For example, with data from four European countries, Näswall & De Witte (2003) show that blue-collar, contingent, older, and less-educated workers all experience relatively high levels of job insecurity. De Bustillo & De Pedraza (2010) propose a model that links factual labor conditions and personal characteristics with subjective interpretations, including JI beliefs. They identify a set of objective risk variables, such as gender, age, education, wage, and type of contract, which contributes to JI. In addition, Peiró et al. (2012) indicate that perceptions of being overqualified relate positively to JI.

The employment contract type is an obvious influence on the level of JI (Feather & Rauter 2004, Silla et al. 2005). Feather & Rauter (2004) find that contracted teachers report more JI than permanent teachers; Klandermans et al. (2010), studying perceptions of the likelihood and severity of job loss, find that workers with an objectively insecure employment status perceive that job loss is more likely but less severe, whereas employees with an objectively secure employment status perceive job loss as less likely but more severe. However, Silla et al. (2005) argue that temporary workers should not be treated as a homogeneous group, such that they categorize four types of temporary workers according to their contract preference and employability level. Permanent temporaries and traditional temporaries perceive that they have low employability and accordingly report higher levels of JI than other temporary groups or workers with permanent contracts.

Individual differences also have a role in shaping JI perceptions. For example, Kinnunen et al. (2003), examining the relationship between JI and general self-esteem using longitudinal data, reveal that high JI predicts subsequent low self-esteem, but simultaneously and to the same extent, low self-esteem seems to predict high job insecurity. Debus et al. (2014) report that negative affectivity relates positively to JI. In a study of cultural values and career outcomes, Ngo & Li (2015) suggest that Chinese employees' sense of tradition, or the extent to which they endorse traditional hierarchical role relationships prescribed by Confucian social ethics, affects their perceptions of justice and JI, which in turn affect their job and career satisfaction.

Finally, although little evidence is currently available, employees might be proactive in responding to JI, such that they attempt to influence the level of security they feel. According to Huang et al. (2013), instead of being victims, job-insecure employees may engage in social influence tactics that reduce their feelings of JI. Some evidence also indicates that people can deal with JI by building up their employability or marketability. External employability is a personal resource that employees can leverage to reduce their JI (De Cuyper et al. 2008, 2012; Peiró et al. 2012). According to Spurk et al. (2016), career adaptability relates positively to perceived internal and external marketability, and both of these factors are negatively associated with job and career insecurity.

Taken together, literature and meta-analytic reviews over the past two decades reinforce the sense that the organizational context and its employee-centered practices, individual circumstances, and individual differences all contribute to JI perceptions. As we have noted already, automation and new technological changes continue to change the nature of work, contributing to the insecurity of not just jobs that require less skill but also those that involve more complicated, professional skills. Therefore, continued research needs to investigate the extent to which new contextual changes contribute to JI and to propose ways to counteract or help people cope with their perceptions of uncertainty and insecurity.

Outcomes

Since 2003, research in this field has demonstrated a decided interest in the positive and negative consequences of employee job insecurity. Eighty-seven of the 130 studies we reviewed focus on outcomes. These studies fall into four main categories. In addition, existing meta-analyses (Sverke et al. 2002) largely support the anticipated negative effects of JI on effort, intentions to leave, resistance to change, organizational productivity, turnover, and adaptability, as suggested by Greenhalgh & Rosenblatt (1984). Moving beyond the studies covered by Sverke et al. (2002), which are mostly correlational and constrained by a common method bias, we find that recent studies beneficially feature improved methodologies, multiple sources, and time-lagged or longitudinal designs.

Employee health and well-being. The most consistent evidence regarding the detrimental impacts of JI refers to employee health outcomes, including mental and physical health (Hellgren & Sverke 2003, Näswall et al. 2005, Schreurs et al. 2010), psychological well-being (Huang et al. 2012a, Mauno et al. 2005, Richter et al. 2014), and burnout and emotional exhaustion (De Cuyper et al. 2012, Kinnunen et al. 2014, Jiang & Probst 2016). Building on appraisal and conservation of resources theories, Vander Elst et al. (2014b) propose a reciprocal relationship between JI and employee well-being (defined as emotional exhaustion and vigor). With a two-wave, repeated measure design, they find support for the impact of JI on well-being through perceived control but not the other way round. With large-sample survey data, Lozza et al. (2012) indicate that JI is associated with sacrifices related to daily consumption (e.g., buying groceries, apparel, or entertainment) and life projects (e.g., buying a home, marrying, having children).

Job, organization, and career attitudes. Consistent evidence also indicates a negative association between JI and key attitudinal outcomes, such as employees' organizational commitment and job satisfaction (De Cuyper et al. 2009b, Debus et al. 2012, Ito & Brotheridge 2007, Jiang & Probst 2016, König et al. 2011), intent to remain with the organization (Huang et al. 2017, Kinnunen et al. 2014, König et al. 2011, Mauno et al. 2014, Murphy et al. 2013), work involvement (Peiró et al. 2012), and work engagement (De Cuyper et al. 2008, Park & Ono 2016, Vander Elst et al. 2012). In addition, JI affects career attitudes, such as career satisfaction and commitment (Ngo & Li 2015; Otto et al. 2011, 2016).

Performance and behavioral outcomes. Prior meta-analytic evidence regarding the link between JI and job performance is mixed (Cheng & Chan 2008, Sverke et al. 2002), and this inconsistency has persisted in more recent research too. For example, JI exhibits a small positive (e.g., Gilboa et al. 2008) or null (e.g., Loi et al. 2011) association with supervisor-rated job performance. With a sample of nonmanagerial workers in Germany, Staufenbiel & König (2010) assert that the direct relationship of JI to self-rated performance is insignificant but that to supervisor-rated performance is positive; the indirect relationships of JI to both performance ratings, through job attitudes, are negative. In three studies with multiple methods, Probst et al. (2007) find that respondents threatened by layoffs score lower on a creative problem-solving task than those who are not so threatened. They also establish that fear of layoffs increases workers' productivity.

In addition to task performance, some research considers how people react to JI. For example, Huang et al. (2013) leverage proactivity and social influence theories to propose that JI creates a motive to engage in social influence attempts through the use of impression management tactics that reduce subsequent JI perceptions. To investigate whether JI might be a double-edged sword, Lam et al. (2015) predict a curvilinear relationship between JI and organizational citizenship

behavior (OCB). That is, on the basis of mixed findings about this relationship, they propose and find that as JI increases from low to medium levels, OCB decreases because people perceive deteriorating social exchanges. As JI continues to increase, though, the employees become more interested in OCB—not to pay back the organization—but as an impression management strategy to enhance their chances of survival within it. Similar curvilinear effects between JI and self-reported job performance have been reported by Selenko et al. (2013). These studies suggest the need to continue examining potential moderators that might contribute to JI and its performance and behavioral outcomes.

Furthermore, JI has implications for workplace deviance (Huang et al. 2017); it can trigger a moral disengagement mind-set that prompts organizational and interpersonal deviance behaviors in the workplace. The negative emotions that come with JI also contribute to reduced safety compliance and more workplace injuries (Jiang & Probst 2015), as well as workplace bullying (De Cuyper et al. 2009a) and fraudulent intentions among employees (Benjamin & Samson 2011). In turn, JI influences an array of other behaviors, such as employee voice (Berntson et al. 2010, Schreurs et al. 2015), building facades of conformity (e.g., suppressing personal values, pretending to embrace organizational values) (Hewlin et al. 2016), pursuing career development strategies (Peiró et al. 2012), and engaging in job searches (Murphy et al. 2013). To understand and manage the behavioral implications of JI, further research should continue investigating how people manage the uncertainty they suffer when they perceive a threat of losing their jobs as well as the emotions that accompany such uncertainty.

Interpersonal contagion and spillover effects. Drawing on spillover theory, which indicates that an employee's work experiences carry over into the home and that experiences at home affect people's work (Bolger et al. 1989), Lim & Loo (2003) show that children can perceive their parents' JI, such that paternal and maternal JI relate negatively to children's self-efficacy. In a subsequent study, Lim & Sng (2006) indicate that paternal, but not maternal, JI relates positively to children's money anxiety. These researchers are the only ones who examine spillover effects from parents to children, and their findings suggest that feelings of JI can be contagious among people who interact closely. Continued research might test some adaptive methods that would enable parents to avoid passing their JI on to their children, such as by using work-nonwork support programs. Boswell et al. (2014), drawing on an adaptation perspective, suggest that employees who feel greater JI undertake adaptive work behaviors, including reduced use of work-nonwork support programs and a greater willingness to let work permeate into their personal life, which then evokes greater work-nonwork conflict and emotional exhaustion. Changing the ways employees cope with JI may minimize work-family conflict and thus mitigate the negative reactions of other members of their role set.

Overall, these results suggest that JI perceptions can produce both positive and negative outcomes. The effects also are not necessarily simple or direct.

Moderators

Considering JI's impact on individuals and organizations, it is crucial to understand the boundary conditions of these effects and how to manage them, and this demand drives substantial research on the moderators of JI effects. Individual dispositions play a significant role in shaping the impact of JI. In their review, Sverke & Hellgren (2002) note that Roskies et al. (1993) identify personality dispositions, and positive and negative affectivity in particular, that influence the impact of JI on individual employees. This finding receives support from Näswall et al. (2005), who find that Swedish nurses with low levels of negative affectivity and high levels of positive affectivity experience less

negative reactions to JI than nurses with the opposite affectivity pattern. Ito & Brotheridge (2007) and König et al. (2010) also indicate that people with an internal locus of control experience less negative reactions to job insecurity. According to Lam et al. (2015), psychological capital (i.e., experiencing hope, optimism, efficacy, and resilience) moderates the U-shaped relationship between JI and OCB: It is more pronounced among employees who possess less rather than more psychological capital because those with higher psychological capital are more satisfied with their organization and more willing to help it. These findings suggest that individual dispositions matter when it comes to predicting how people will respond to JI perceptions.

A second set of moderators involves demographic factors. In their meta-analytic review, Cheng & Chan (2008) show that the positive association between JI and turnover intentions is stronger among employees with shorter job tenures and among younger employees. However, the negative effect of JI on health outcomes appears more severe among employees with longer tenures and among older employees. They find no gender differences related to attitudinal, psychological, or physical health outcomes. As a possible explanation for these findings, the threat of unemployment might affect longer-tenured employees more because it entails a threat to their very identity, especially as they inch closer toward retirement, whereas for younger, shorter-tenured employees, a job change has fewer identity implications. In investigating specifically how the effects of JI vary across age groups, Stynen et al. (2015) determine that JI strongly frustrates the basic needs and hinders the citizenship behaviors of older workers. Further investigations should detail how age, gender, tenure, education, and other demographic differences influence individual responses to JI.

In line with these findings, scholars also examine the role of employment contracts and employability. For example, in a study of temporary and permanent workers in Belgium, De Cuyper & De Witte (2007) find that JI is perceived as a breach of permanent workers' psychological contracts, so it lowers their organizational commitment and job satisfaction more than for similarly situated but temporary workers. De Cuyper et al. (2009b), with a sample from 23 Belgian organizations, replicate these findings. According to Mauno et al. (2005), permanent employees experiencing high JI in the Finnish health care sector report lower job engagement, lower job satisfaction, and higher job exhaustion than do fixed-term employees. These studies indicate that JI affects permanent workers more negatively than it does fixed-term or temporary workers.

With regard to the moderating role of employability, De Cuyper et al. (2009a) consider its dark side. Using samples from two Belgian organizations, they note that workplace bullying is stronger among high versus low employability employees who experience JI. Huang et al. (2017) also find that employability increases deviant behaviors among workers who suffer JI. These findings seem to be at odds with Silla et al.'s (2009) finding that employability can help employees cope with JI perceptions. We posit that people with good employability feel in control of their job situation, so they act out by bullying their coworkers or engaging in other organizationally deviant behaviors. Further research should explore the contextual factors that might bring out the bright versus dark side of employability.

Other research tests the role of perceived organizational justice and strong employee-employer or employee-coworker relationships for buffering the negative effects of JI. In a study of employees of a Spanish public organization, Silla et al. (2010) show that organizational justice buffers the negative effects of JI on organizational commitment, job satisfaction, and intentions to stay (see also Sora et al. 2010). Among blue-collar workers from two Italian organizations, Piccoli et al. (2011) find that low procedural and interactional justice increases the negative effects of JI on affective commitment and altruism. However, for self-rated job performance, justice perceptions exacerbate the negative effect of JI. These authors suggest that in fair situations employees attribute their negative self-evaluations to internal rather than external causes. Kausto et al. (2005) examine JI as a moderator of the link between procedural justice and employee well-being. Their sample

of Finnish employees reported a higher risk of emotional exhaustion and more stress symptoms when they perceived the organization as unfair and also experienced JI.

Several studies affirm similar buffering effects of employee-employer and employee-coworker relationships. For example, Schreurs et al. (2012) propose that JI signals an employer's psychological contract violation, which motivates employees to reduce their contributions to the organization; however, support from supervisors or coworkers may help restore their commitment. Using a within-person study design and Dutch respondents from 15 companies located in Belgium, Schreurs et al. (2012) show that supervisor support, but not coworker support, moderates the relationship of JI with in-role performance but not its relationship with extra-role performance. It appears that because supervisors have control over critical resources the relationship between employees and supervisors matters more than relationships with coworkers. In a study conducted with a Chinese sample, Lam et al. (2015) identify how a good interpersonal relationship with a supervisor (conceptualized as supervisor-subordinate *guanxi*) moderates the U-shaped relationship between JI and OCB, such that the curve is more pronounced among employees with lower *guanxi*, suggesting a buffering effect. Huang et al. (2017) find that employees' exchange relationships with their supervisors, as indexed by leader-member exchange, mitigate the connection between JI and moral disengagement. In several studies, Loi and colleagues (Loi et al. 2011, 2014) determine that leader-member exchange leads to stronger organizational identification and altruism when JI is low among Chinese employees. Jiang & Probst (2016) and Wong et al. (2005) also find that trust in management buffers the negative effects of JI on satisfaction with the supervisor and with work, as well as affective commitment to the organization. Taken together, these studies, using samples mostly from China and Europe, indicate that organizations and their managers can help employees through both good and bad times by developing and maintaining high-quality relationships with them.

Wang et al. (2015) invoke the uncertainty management theory of Lind & Van den Bos (2002) to propose that information about fairness helps employees reduce the stress associated with uncertainty (such as job insecurity). Company records and supervisor-rated performance measures in two studies of Chinese organizations confirm their predictions: JI relates to job performance at low but not at high levels of organizational justice. Drawing on the same theory, Loi et al. (2012) confirm, in two samples from Macau and China, that procedural justice lowers JI, and this relationship is stronger when the leader is ethical, as well as among low power distance employees who prioritize open communication and participation as signs of fairness. A study of employees of a large Swiss logistics company (König et al. 2010) also affirms that organizational communication can mitigate the negative effects of JI.

Finally, several studies have examined whether reducing uncertainty and increasing perceived control, through participative decision making, may attenuate the negative effects of JI. For example, in Probst's (2005) study of blue-collar workers from six U.S. and Chinese organizations who were experiencing JI, she finds that, with greater participative decision-making opportunities, JI leads to increased coworker, supervisor, and work satisfaction; lowered turnover intentions; and fewer withdrawal behaviors, such as arriving late or not completing work tasks. With a similar theoretical framing but a diverse sample of Belgian workers, Schreurs et al. (2010) indicate that job control but not job self-efficacy buffers the negative effects of JI on employee health.

THEORETICAL PERSPECTIVES

Since 2003, researchers have adopted a variety of theoretical perspectives. A dominant theory, the social exchange perspective (which is similar to a psychological contract perspective), argues that organizations and individuals enter into exchange relationships. If individuals come to expect job security from an organization, and it fails to provide it, the employees react by reducing the inputs

they dedicate to the organization. In addition, they may be unable to maintain their attitudinal bonds with the organization or contribute to its welfare (Ashford et al. 1989, Bernhard-Oettel et al. 2011, Silla et al. 2010, Wong et al. 2005). The social exchange perspective has been extended to include psychological contract theory explicitly, recognizing that organizations and employees create implicit contracts about what each will provide in their relationship. This perspective helps explain the differential effects of JI, especially when considering whether an employee's contract with an organization is temporary, fixed-term, or permanent (Bernhard-Oettel et at. 2013; De Cuyper & De Witte 2006, 2007; Feather & Rauter 2004).

Another popular theoretical perspective is obviously pertinent to JI, namely, the stress-strain perspective. JI is a stressor that consumes the mental and emotional resources of insecure employees, evoking various physical, mental, and psychological strain reactions that are detrimental to mental health and well-being (Cheng & Chan 2008, Jordan et al. 2002, Staufenbiel & König 2010, Sverke et al. 2002). Most studies adopt Lazarus & Folkman's (1984) appraisal theory of stress and coping, which suggests a two-stage process in response to external stressors (e.g., Kinnunen et al. 2014, König et al. 2011). Other scholars use an adaptation perspective (Boswell et al. 2014) to argue that stresses that come with JI trigger employees to adapt by doing more work at home (what these authors call work-to-nonwork boundary permeance) while making less use of the work-nonwork supportive programs provided by their employers. These forms of (mal)adaptation prompt greater emotional exhaustion and more work-nonwork conflict (Boswell et al. 2014). Furthermore, this line of research indicates that employees tend to react to JI emotionally.

Hobfoll's (2001) conservation of resources theory also has been invoked more recently to explain reactions to JI, which constitutes a threat to employees' resources. In this framework, stable employment is a valuable resource, and JI threatens it, so employees engage in attitudinal and behavioral responses (Jiang & Probst 2016, Kinnunen et al. 2003). A sense of control and support from the system, a supervisor, or coworkers also can ameliorate the negative effects of JI because employees can use these resources to enhance their coping efforts. Conservation of resources theory often appears together with other perspectives, such as stress-strain theory, to explain the impact of JI and its boundary conditions (e.g., Mauno et al. 2005, Vander Elst et al. 2014b). Although scholars cite the moderating effects of various resources, such as financial means (e.g., Vander Elst et al. 2016) and social or colleague support (e.g., Schreurs et al. 2012), they seldom explore how people conserve their resources for future use. For example, employees might engage in OCB to establish high-quality relationships with their bosses. Having such a relationship then becomes a resource that can help reduce their uncertainty about their job prospects and aid their coping efforts should JI arise.

A fourth theoretical perspective conceptualizes JI as an uncertain context (Wang et al. 2015), such that uncertainty management theory offers insight, with the prediction that employees may be more concerned about fair treatment in times of uncertainty than in relatively certain times. Depending on their perceptions of organizational fairness, employees then may reduce their work engagement levels (Mauno et al. 2007), and this decision subsequently increases or decreases their job performance. Huang et al. (2013) also suggest that employees adapt proactively to JI by engaging in impression management tactics. Especially when supervisors like the subordinate and attribute employee behaviors to altruistic motives, engaging in social influence tactics helps employees enhance their performance ratings and reduce their future JI.

On the basis of a theory suggesting that lack of personal control and self-determination can frustrate employees' psychological needs (Vander Elst et al. 2014a,b), some studies highlight the influence of perceived control on reactions to JI. For example, Vander Elst et al. (2012) argue that frustrated needs for autonomy, competence, and belongingness explain why JI impairs work-related well-being (lower vigor, higher emotional exhaustion) and psychological outcomes

(affective commitment, turnover intentions). Along similar lines, Probst (2005) conceptualizes JI as a job demand and participative decision making as a form of job control that can counteract the negative effects of JI on job attitudes and behaviors. Strazdins et al. (2004) uncover a similar mitigating impact of job control on employees' health risks. These studies focus on participation as a means to create perceived job control; additional studies might examine other means to establish a sense of job control, such as empowerment provided by the organization or job crafting initiated by employees, to determine if they can also minimize the negative effects of JI.

Some researchers are beginning to explore JI contagion. For example, Lim & Sng (2006) apply spillover theory and propose that children's monetary anxiety comes from their parents' monetary anxiety, stimulated by paternal JI, and that anxiety in turn contributes to negative money motives that prompt a lack of intrinsic motivation to work. Zhao et al. (2012), using social cognitive and spillover theories, also propose that paternal JI spills over to the family domain. Among a sample of undergraduate students and their fathers, these authors reveal how paternal JI negatively influences youths' career self-efficacy because it affects how fathers engage in career-specific parenting behaviors, such as engagement, support, and interference.

Noting the potential for interpersonal contagion of JI, some scholars have begun to study the JI climate in teams and organizations. Evidence indicates the existence of unit-level JI perceptions and feelings. For example, Sora and coauthors (2009, 2013) relate the JI climate in an organization to employee outcomes, above and beyond individual JI. Jiang & Probst (2016), with a sample of 171 employees in 40 workgroups, also find that the affective JI climate in groups relates negatively to behavioral safety compliance, while also moderating the relationship between individual JI and safety outcomes. The nature of JI perceptions and feelings suggests the clear possibility that they might be shared among individuals. More rigorous theorization in this direction is needed to understand whether and how JI might constitute a higher-level phenomenon.

DIMENSIONS OF JOB INSECURITY ACROSS REGIONS AND CULTURES

JI research has a long and admirable track record, featuring empirical studies conducted in a variety of global settings. Among the studies we reviewed, more than half were conducted in Europe, followed by Asia, North America, Australia, and other places. In Europe, Belgium, Sweden, Italy, the Netherlands, and Germany have been the focus of most research attention, whereas studies in North America have been mostly conducted in the United States. In the Asia-Pacific region, the majority of the studies refer to China, followed by Australia, Korea, Taiwan, Singapore, and then other places. Although limited in number, we also found studies conducted in African countries, such as South Africa and Nigeria.

We can observe both commonalities and differences among studies conducted in various regions. Overall, the definitions and conceptualizations of JI are largely shared; the features we discussed in the first section of this article are generally accepted. However, some notable differences arise in terms of research focus and method. Such comparisons are meaningful and interesting because they provide a chance to consider the broader picture of JI research in diverse environments, identify influential contextual factors, and offer suggestions for further research. They also help identify concerns, such as when scholars working in one region might be ignoring or failing to integrate literature generated in other regions.

Research Focus

Studies across different regions mostly focus on the nomological network of JI, as we have outlined in the above sections, but their research foci also exhibit some important differences.

For example, in terms of the consequences of JI, most studies examine employee well-being, job attitudes, and work behavior outcomes. However, research in Europe seems to devote more attention to well-being and health outcomes (e.g., Mauno et al. 2014, Näswall et al. 2005, Otto et al. 2011, Pelfrene et al. 2003, Richter et al. 2014, Schreurs et al. 2010, Selenko & Batinic 2013, Vander Elst et al. 2016), whereas that conducted in North America and Asia seems to focus on outcomes important to employers, such as work attitudes and job performance (e.g., Chiu et al. 2015, Huang et al. 2017, Lam et al. 2015, Loi et al. 2011, Wang et al. 2015, Wong et al. 2005). We posit that JI research in Asia and North America might be conducted mostly by organizational researchers, whose focus is on management issues, leading to their greater attention to the impact of leadership, organizational justice, and so forth. In contrast, research in Europe has been mostly performed by psychologists who are interested in employees' psychology and well-being, prompting their focus on the psychological processes and impacts of JI and its implications for industrial relationships.

In addition, we find some unique antecedents and outcomes across regions. For example, researchers in both Europe and North America highlight safety-related behaviors and outcomes (e.g., Emberland & Rundmo 2010, Jiang & Probst 2016, Probst et al. 2013) and the impact of family roles (e.g., Mauno & Kinnunen 2002, Richter et al. 2010). The only studies that examine the spillover effects of parental JI on family members were conducted in Singapore (Lim & Loo 2003, Lim & Sng 2006, Zhao et al. 2012). The influence of basic demographic variables, including age (e.g., Stynen et al. 2015) and gender (e.g., Camgoz et al. 2016, Kausto et al. 2005, Rigotti et al. 2015), has been an explicit focus in several studies in Europe, but such inductive research is rare elsewhere. Studies that examine generational differences in JI experiences also take place mostly in Europe (e.g., Buonocore et al. 2015, Kinnunen et al. 2014, Peiró et al. 2012). For example, Buonocore et al. (2015) show that millennials perceive higher levels of JI than baby boomers and Gen Xers, yet JI produces more negative consequences on work attitudes among the older cohorts. Kinnunen et al. (2014) and Peiró et al. (2012) both find that young workers experience high levels of JI. Therefore, continued research, using samples from different regions, must investigate explicitly how different generations, and particularly younger workers, experience and respond to JI.

Cultural Factors

In Keim et al.'s (2014) meta-analysis, they hypothesized and found that the country where data was collected, as a proxy for culture, moderates the relationship between predictors (e.g., age, gender, and contract type) and JI. Despite the known impact of contextual attributes on JI, not many studies explicitly examine cultural factors. The exceptions are notable. Probst & Lawler (2006) measure cultural variables at both individual and country levels and thus reveal that employees with collectivist cultural values are more negatively affected by JI than their individualist counterparts. Specifically, Chinese (collectivist) employees react more negatively to the threat of JI than their U.S. (individualist) counterparts. Debus et al. (2012), using a sample of 15,200 respondents in 24 countries, find that, in countries with high enacted uncertainty avoidance values, where people feel uncomfortable with ambiguity, employees express fewer negative reactions to JI than do employees in countries with low enacted uncertainty avoidance values. In a comparison of JI correlates, König et al. (2011) shows that Swiss respondents score higher on uncertainty avoidance than their U.S. counterparts, but contrary to the study proposition, the relationships between JI and outcomes (e.g., job satisfaction, organizational commitment, turnover intentions) are stronger in the United States than in Switzerland. The authors offer the different social safety nets of these two countries as a plausible explanation. Sender et al. (2017) survey employees in the German- and French-speaking regions of Switzerland, which score differently on their uncertainty avoidance

and performance orientation, to show that the relationship between JI and turnover intentions is stronger in the French-speaking region, which is marked by higher uncertainty avoidance. In contrast, the negative relationship between JI and job satisfaction is stronger in the German-speaking region, where there is a higher performance orientation. Overall, there seems to be sufficient evidence that cultural factors shape how people experience and respond to JI, although not enough to draw a clear picture about culture's precise impact.

Other Cross-National Environmental Factors

In addition to cultural factors, studies explicitly examine environmental factors, such as the economic situation of the country, the nature of the social welfare system, overall regional unemployment rates, or the level of union support (e.g., De Cuyper et al. 2010, Hellgren & Chirumbolo 2003, Klandermans et al. 2010, Otto et al. 2011). For example, Hellgren & Chirumbolo (2003), using samples from five counties in Europe, show that the level of union support does not reduce the negative impact of JI on mental health complaints as they expected. Otto et al. (2011) measure regional unemployment rates in Germany as an objective measure of JI to address their influence on employee work outcomes and well-being; another study in Germany indicates that microeconomic parameters at the district level (e.g., regional unemployment rate, change in the number of gainful workers in a district, change in district economic growth) do not directly influence perceived JI but instead moderate the relationships of employee-perceived JI with outcomes (Otto et al. 2016). Debus et al. (2012) identify the social safety net as a country-level moderator or as a buffer of the impact of JI on job satisfaction and affective organizational commitment. In addition, Jiang & Probst (2017) reveal that income inequality at both the country level (data from 30 countries) and state level (data from 48 U.S. states) moderates the JI-burnout relationship. Overall, macroenvironmental factors have been considered more often in research in Europe than elsewhere. The rapid changes in modern workplaces, particularly in developing countries, suggest the prominent need for research in these regions that explicitly investigates how environmental factors influence JI and its outcomes.

TRENDS AND AREAS IN NEED OF FURTHER RESEARCH

Not surprisingly, considering the vast changes in employee-employer relations, global economic trends, and the automation of work, JI has sparked a lively and growing literature stream. We would be hard pressed to imagine that it would not become a more prominent feature of people's work lives in the future. As such, JI is an important organizational reality and worthy of continued and extended study. We offer several suggestions for this research stream in the interest of enhancing our knowledge and research impacts in the future.

Improve Measurement

JI literature features a plethora of theories, measures, and frameworks, the use of many different measures creates a problem. We counted more than 20 measures, including 8 self-developed scales, that have appeared in this literature stream since 2003. European scholars seem to favor measures developed by European scholars (e.g., De Witte 2000); some studies use their own (typically single-item) measures. The convergence of the content of these measures is unknown, which constitutes an ongoing challenge to the development of JI research. Thus, researchers must undertake a careful examination of the measures used. For example, does Ashford et al.'s (1989) subscale of perceived risks to the total job pertain to Caplan et al.'s (1975) or Oldham et al.'s (1986) scales? Is there any predicted or conceptual value associated with separating cognitive and

affective JI, measuring them with separate scales, or is it fine to combine them (Borg & Elizur 1992, Kuhnert & Vance 1992)? Similarly, should we retain the distinctions between quantitative and qualitative JI (Hellgren et al. 1999) or between job loss insecurity and job feature insecurity? To move JI research forward, we need empirical tests of existing JI measures that yield advice about appropriate measures and, hopefully, more consensus. Investigators also should pay more attention to and be willing to maintain standards for improved measurement quality.

Dimension Decisions

Ashford et al.'s (1989) multiplicative JI measure [and Greenhalgh & Rosenblatt's (1984) theoretical perspective on which it is based] has not really taken hold. Scholars seem perfectly comfortable measuring perceptions that a job is insecure without incorporating notions of powerlessness in their measures of JI or even in their models that predict outcomes of JI. It may make sense to consider powerlessness as a construct separate from JI, but this distinct construct should still be included in JI models and studies. Insecurity that an employee actually has the power to counteract is psychologically different from insecurity that he or she is powerless to address. We also note a dominant focus on insecurity about the total job with much less interest devoted to employees' perceptions that the particular features of their jobs may be lost. As the world of work changes, we anticipate a greater need to study insecurity about particular job features. For example, as more jobs become automated, they may improve for human employees because their routine tasks get taken over by the technology or else become worse because jobs controlled by technology offer the human employees less freedom and creativity. Studies of job feature losses could help clarify whether employees might keep their jobs in the future but lose many attractive job features. Along these lines, researchers could examine which job features are most important, such that their loss would have the greatest effect on job holders.

Incorporating Expectation Levels in the Changing Workplace

In their review of technology and the changing nature of work and organizations, Cascio & Montealegre (2016) highlight the disruptive effects of emerging technologies on the number and type of jobs offered in the future. They argue that robots or digital agents will perform many of the jobs currently performed by humans by 2025, leaving the typical worker worse off. In his book *The Vanishing American Corporation: Navigating the Hazards of a New Economy*, Davis (2016) describes the declining number of traditional public corporations and increasing number of alternative organizational forms, such as short-lived, project-based enterprises. Using the terms Nikefication and Uberization to describe this world of work, Davis persuasively documents the trend of organizations becoming nexuses-of-contracts, which can contract on-demand labor for each task using online platforms. Such changes "threaten to turn jobs into tasks, to the detriment of labor [as] every input into the enterprise becomes possible to rent rather than to buy, and employee-free organizations are increasingly feasible. Enterprises increasingly resemble a web page, a set of calls on resources that are assembled on demand to create a coherent performance" (Davis 2016, p. 502). If corporations really are disappearing, JI will continue to be a prominent feature of work and life going forward (Davis 2016).

But will it really? The experience of JI in the samples reported thus far has largely been a function of their expectations about what their work, careers, and organizations should offer employees. If full employment is the expectation, anything less creates anxiety and insecurity. But as the world of work changes and people adjust, that expectation may disappear. What would such

changes in expectations mean for feelings of JI? We also posit that various forms of individual agency and proactivity might buffer feelings of anxiety; for example, the ability to craft their own jobs within the company could provide employees a form of agency, enabling them to craft and recraft their jobs to ensure their continuing value even in a shrinking organization. As people increasingly accept jobs that involve temporary contracts with various firms, anxiety may become a more prominent feature of work in which case agentic strategies for managing these anxieties emerge as important predictors of both workers' mental health and their job or career success (Petriglieri et al. 2017). Further research should examine the agentic strategies people use proactively to prevent JI (including investments in human capital) and to alleviate the downsides (e.g., anxiety, and psychological and physical well-being) of JI once it arises.

Consideration of Career Insecurity

Recent descriptions of the future world of work suggests the need to expand the JI lens to include situations in which entire careers become insecure. People who have invested substantial resources to prepare for their careers (e.g., journalism, law, financial analysis) are seeing their professions undermined by changing economic circumstances, shifting preferences for receiving services, and automation. What do professionals do when not just their job but their entire career, which they spent years training for, becomes less certain? The Semi-Automated Mason bricklaying robot can do the work of six unionized masons each day, and it never requires a break, benefits, or a paycheck (Murphy 2017). Will it replace skilled construction workers? ROSS intelligence is a legal robot that uses artificial intelligence to automate legal processes (Turner 2016). What kind of uncertainty does it create for paralegals at both job and career levels?

We imagine two notable differences between job and career insecurity. First, the social stigma typically associated with JI and job loss may be dramatically lower for career insecurity and career loss. No one individual has lost his or her job; the entire career sector is no longer viable. Second, matters of identity likely come more clearly to the fore in response to career insecurity. Considerations of identity loss, reactions associated with such loss, and the identity work that people might perform to move forward constitute fruitful areas for research that considers career rather than individual job insecurity.

The Effects of Leaders' Job Insecurity

Leaders face unique JI challenges; their future is often determined by the performance of the collective (e.g., firing a coach rather than the entire team when performance is poor). The long-standing pattern by which chief executive officers are replaced if the organization fails to meet its targets suggests considerable JI for top managers. It also suggests that new leaders, with a different vision, can come in and foster a different culture in an effort to turn around the organization. Yet we find no research that examines JI at the top of organizations or its potential effects on job and organizational performance. Relatedly, studies might examine how new leaders can change the conditions that might have created an insecure job experience for employees.

Expanding Focus on Pragmatic and Practical Conditions that Foster or Ameliorate Job Insecurity

We value conceptual research into potential predictors and moderators; we also applaud research that addresses more pragmatic conditions that affect JI and individual reactions to it. For example, employability and the nature of the social welfare system both are likely to exert significant effects

in terms of whether people experience JI and how they cope with it. More such research is necessary. We suggest this effort should begin particularly by looking at social class. For some social classes, as well as some generational cohorts, JI has been a fact of work life for some time, so their responses to it may differ from those of traditionally employed workers in secure jobs for whom JI comes as an unexpected and unpleasant surprise. But groups with more JI experience may develop sharing norms or models of strategies for coping with it. Additional research can explore how other practical conditions, such as community support, help reduce either JI or its impact on individual workers.

Another compelling topic is the impact of social media. As we become more digitized, social media have radically changed how people interact, implying their potential to revolutionize organizational behaviors (McFarland & Ployhart 2015). Digital platforms could increase JI perceptions by enhancing rapid awareness of market conditions and organizational changes. Yet at the same time, social media can create social networks that provide support or facilitate reemployment. McFarland & Ployhart (2015) offer a theoretical framework that may provide a foundation for extending existing theories. Continued research might apply this framework to study how social media affect people's perceptions of and responses to uncertainties related to their job future.

Expanding a Process Focus

Finally, we prioritize research that applies a process lens to JI. For example, Huang et al. (2017) examine people's tendencies to disengage morally when they experience JI as well as the impact of that disengagement on outcomes. Hewlin et al. (2016) also offer an interesting study of facades of conformity to determine how people experiencing JI attempt to change their circumstances by offering vivid displays of fitting in and conformity. If insecurity continues to grow and become a more prominent feature of the work environment in the future, a process approach that captures how people make sense of their personal situation, draw on resources to cope with it, and react in productive ways becomes essential, especially as the research field seeks to help people cope with their new, JI-laden reality. **Table 2** is a summary of our above discussions about future research directions.

Table 2   Research directions

Areas in need of research	Potential research questions
Improved measurements	In converging the content of different measures and their distinctions, what should we retain? Can we arrive at a consensus about what measures to use in future research?
Dimensionality decisions	Should power(lessness) to counteract JI be a dimension of the job insecurity construct? Which are the most important job features, whose loss will have the greatest effect on job holders in the future?
Expectation levels	How do the changing forms of organizations influence individual employees' expectations about their jobs, and how does that shape their responses to JI?
Career insecurity	What difference might it make if it is the career, rather than the job, that is insecure?
Effects of leaders' JI	When leaders face JI, how does it influence employee and organizational outcomes?
Pragmatic and practical conditions that foster or ameliorate job insecurity	What are some of the more pragmatic conditions that affect JI and individual reactions to it? What are the impacts of social media?
Expanding the process focus	How can a process-based approach capture the ways that people make sense of their personal situation of insecurity, draw on resources to cope with it, and react in productive ways, and how can we help people cope with the new reality of JI?

CONCLUSIONS

In the past 15 years, empirical research on JI has grown significantly. On the one hand, a broad range of antecedents, outcomes, and moderators have been studied, using new and interesting theoretical perspectives. On the other hand, the field continues to suffer from several limitations, such as a proliferation of divergent measures. Our review of relatively recent literature also reveals some interesting differences across geographic areas, suggesting the need for researchers in Europe, North America, Asia, and other places to come together more often. Perhaps most important, we call for in-depth research that carefully considers the rapid changes in the workplace today and in the future. David Neumark (2000, p. 23) introduces his edited book *On the Job* by commenting that "it is therefore premature to infer long-term trends toward declines in long-term employment relationships, and even more so infer anything like the disappearance of long-term, secure jobs." Following nearly two decades of rapid changes in every aspect of the workplace, we believe it is no longer premature to infer such trends, including the disappearance of long-term, secure jobs. Instead, we propose that JI is and will continue to be a predominant employment issue, such that research into it will only increase in importance and relevance.

DISCLOSURE STATEMENT

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