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## When Minor Insecurities Project Large Shadows: A Profile Analysis of Cognitive and Affective Job Insecurity

Anthony Naranjo<sup>1</sup>, Mindy Shoss<sup>1,2</sup>, Alissa Gebben<sup>1</sup>, Michael DiStaso<sup>1</sup>, Shiyang Su<sup>1</sup>

<sup>1</sup>University of Central Florida

<sup>2</sup>Australian Catholic University

### Abstract

People are generally thought to worry about potential job loss to the extent to which they view job loss as likely to occur. However, might there be some individuals for whom job loss may be so detrimental that they experience high levels of worry even if they view job loss as less likely? To answer this question, the current study leveraged research on future-oriented cognition to investigate profiles of cognitive and affective job insecurity (JI). We examined how economic job dependency relates to different profiles of JI experiences as well as the implications of these profiles for understanding heterogeneity in work strain. Latent profile analysis using the U.S. International Social Survey Program dataset, and replicated in the U.K. dataset, revealed three profiles: employees who are secure in their role and do not worry about potential job loss (secure alignment profile), those who worry significantly about job loss despite perceiving minimal job threats (affective JI misalignment profile), and employees who worry to some extent and perceive minimal job threats (ambivalent JI alignment profile). As anticipated, several economic job dependence factors (perceived employability and education) were predictors of profile membership. Further, those in the affective JI misalignment profile reported the greatest amount of strain. We discuss our results in terms of implications for JI theory and organizational practice.

### Keywords

cognitive job insecurity; affective job insecurity; latent profile analysis; work strain

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“Americans have a more positive assessment of the economy and job opportunities than they did just two years ago and since the end of the Great Recession. At the same time, Americans feel vulnerable and are deeply concerned about the near- and long-term future of the economy and job market.” - Van Horn & Starace, 2018

Growing numbers of employees report uncertainty about the future of their jobs in light of business trends (e.g., the ‘lean-and-mean’ organization, global competition, declining labor power) and major macroeconomic shocks (i.e., the Great Recession, the COVID-19

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Correspondence concerning this article should be directed to Anthony Naranjo, 4111 Pictor Lane Orlando, FL 32816, Anaranj2@knights.ucf.edu.

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pandemic) that have resulted in job loss and placed many jobs at risk (Hollister, 2011; Rudolph et al., 2020). Research on the changing nature of work thus highlights both the increasing importance placed on job insecurity by employees and the ever-changing macro-economic climate that may threaten this job security (Hoffman, Shoss, & Wegman, 2020). Job insecurity (JI) has been found to be a major threat to occupational health and well-being in both longitudinal and cross-sectional research (e.g., De Cuyper et al., 2012; Jiang & Lavaysse, 2018), with detrimental impacts similar in magnitude to that of losing one's job (De Witte, 1999).

However, job insecurity experiences are complex and not everyone experiences job insecurity in the same way (Borg & Elizur, 1992). As such, examining the patterns by which different individuals experience job insecurity may help to understand its occupational health impact. Recognizing that employees' evaluations of the likelihood of future job loss are distinct from their fears or worries about future loss, the job insecurity literature has increasingly sought to differentiate cognitive and affective JI. Whereas cognitive JI captures perceived judgments about the likelihood of job loss, affective JI captures worry about it (Borg & Elizur, 1992; Huang et al., 2010). Although this research has empirically distinguished between cognitive and affective JI, it has been conducted under the assumption that affective JI is an outcome of cognitive JI and acts as a mediator explaining the effects of cognitive JI on indicators of well-being (e.g., Huang et al., 2010, 2012; Jiang & Lavaysse, 2018). Thus, there is an assumption that those who feel that there is a low probability of future job loss are unlikely to experience much worry over potentially losing their jobs.

The current study challenges this assumption. In particular, the current study draws from the cognitive psychology literature on future-oriented thinking to argue that cognitive and affective JI reflect distinct future-oriented processes, with the consequence that some workers may experience levels of affective JI that are greater than their cognitive JI (i.e., they judge the probability of future job loss to be low but are exceedingly worried about it) whereas others experience other possible combinations (Baumgartner et al., 2008; Gilbert & Wilson, 2007; Szpunar et al., 2014). In particular, the literature on future-oriented cognition frames (a) predictions about probability of and (b) worry about hypothetical stimuli as separate reactions to a simulated future event (Szpunar et al., 2014). Leveraging this work, we advance the conceptualization of cognitive and affective JI by suggesting that cognitive JI captures people's predictions about the likelihood of job loss and affective JI taps into people's emotional reactions to the negative consequences of potential job loss. This conceptualization allows us to understand cognitive and affective JI as separate, yet simultaneous processes, which may help explain seemingly paradoxical experiences such as those alluded to in the opening epigraph.

Through a person-centered approach, we examine the specific constellations of affective and cognitive JI that different groups of workers experience. Our research also investigates (a) how variability in people's experiences of job insecurity may be predicted by individual factors related to economic job dependence (e.g., contribution to household income, perceived employability, education, and perceived socioeconomic status; Greenhalgh & Rosenblatt, 1984; Sora et al., 2010), as well as (b) how profiles of job insecurity experiences help explain heterogeneity in work strain as a result of job insecurity. We first examine

profiles in the US sample from a large nationally representative database (the International Social Survey Programme (ISSP Research Group, 2017), and replicate these findings in the UK sample. Across both samples, we compare results from our profile analysis with traditional regression and demonstrate that profile analysis can provide insights beyond regression. Below, we describe our person-centered approach and then turn to potential sources and consequences of heterogeneity in job insecurity experiences.

## A Person-Centered Approach to Job Insecurity

Job insecurity captures the “perceived threat to the continuity and stability of employment as it is currently experienced” (Shoss, 2017, p. 1914). The use of variable-centered analyses to study job insecurity is consistent with the historical dominance of this approach in the social sciences (Morin et al., 2018), and has allowed researchers to examine the relationship between variables by examining shared variance between them at a population level (e.g., correlation, regression; Howard & Hoffman, 2018; Meyer et al., 2013). For instance, researchers have utilized variable-centered approaches to examine the relationship between affective JI and cognitive JI (e.g., Huang et al., 2010; Jiang & Lavaysse, 2018). This has allowed researchers to examine the general degree of correspondence between cognitive and affective JI; that is, whether those who experience high cognitive JI also tend to experience high affective JI (e.g., Jiang & Lavaysse, 2018; Pienaar et al., 2013).

Although variable-centered approaches have been useful in examining correlates of job insecurity, there remain unanswered questions that may require the use of complementary approaches (e.g., person-centered analyses). First, although a correlation provides information about the general strength of the association between cognitive and affective JI, it does not capture the experiences of individuals who might experience differing combinations of levels of these variables (e.g., high cognitive but low affective; high affective but low cognitive) (Morin et al., 2018). If they exist, these profiles of JI experiences may have unique predictors and consequences that are not well-explained using variable-centered approaches.

Second, research using variable-centered approaches have assumed that affective JI is a reaction to (thus, an outcome of) cognitive JI (Huang et al., 2010, 2012; Jiang & Lavaysse, 2018). Thus, from this perspective, cognitive JI serves as a ceiling for affective JI. However, we argue that this assumption is inconsistent with the cognitive psychology literature on future-oriented thinking (Szpunar et al., 2014), which frames predictions about probability of and affective reactions as separate reactions to a hypothetical future event (i.e., job loss). From the perspective of future-oriented cognition (e.g., Szpunar et al., 2014), cognitive and affective JI reflect distinct future-focused phenomenon reflecting the perceived threat of a future event (i.e., job loss), as well as worry about potential consequences of a future event (i.e., job loss). Recent work in future-oriented cognition has suggested that these processes can emerge independently and at the same time (Szpunar et al., 2014). The independence of these reactions suggests that there are situations where individuals may worry about events that are not likely to occur. Indeed, individuals can have strong affective reactions to events that they believe are less likely to occur because of extreme sensitivity to the consequences

of the event (e.g., terrorist attack, plane crash) (Baumgartner et al., 2008; Loewenstein et al., 2001; Slovic & Peters, 2006).

We build on this idea by leveraging a person-centered approach to examine profiles of cognitive and affective JI (Howard & Hoffman, 2018; Morin et al., 2018). With person-centered analyses, there is an assumption that subgroups exist within a sample and differ on how a set of variables are co-experienced (i.e., heterogeneous assumption). For example, person-centered analyses allow us to examine whether individuals indeed hold different profiles of levels of cognitive and affective JI. In doing so, the person-centered approach provides a rich complement to the traditional variable-centered approach (Howard & Hoffman, 2018). It also allows researchers to use membership in subgroups for further analyses (Morin et al., 2018). As a result, person-centered analysis holds promise for capturing workers' lived JI experiences. Indeed, JI research has already seen some benefit to using a person-centered approach to examine profiles of longitudinal trajectories (e.g., Kinnunen et al., 2014; Klug et al., 2019). However, these recent studies were primarily interested in heterogeneity in JI experiences over time and did not differentiate between cognitive and affective JI. Therefore, our study uniquely contributes to the JI literature by using a person-centered analytical approach to further understand how individuals experience patterns of cognitive and affective JI. As we describe below, this approach may also be useful for uncovering predictors of and outcomes of JI profiles.

## Profiles of Cognitive and Affective JI

We expect there to be profiles of cognitive and affective JI characterized by alignment as well as misalignment in levels of these variables. In particular, we anticipate the existence of at least one profile where affective JI is lower than cognitive JI (i.e., people who think job loss is likely but not worried about it, or cognitive misalignment profile). We also anticipate the existence of at least one profile where affective JI is higher than cognitive JI (i.e., people who think job loss is unlikely but are highly worried about it, or affective misalignment profile). From a theoretical standpoint, we argue that these misalignment profiles reflect discrepancies between individuals' evaluations of the likelihood of job loss and the consequences of potential job loss. For instance, past research has suggested that there are some people for whom potential job loss is relatively inconsequential such that they are unlikely to experience high levels of worry even if they thought loss was likely to occur (Borg & Elizur, 1992; Huang et al., 2012; Probst, 2003).

From a future-oriented cognition perspective, Loewenstein and colleagues (2001) argue uncertain situations (e.g., uncertainty surrounding job loss) may provoke an all or nothing reaction such that regardless of the probability of an event occurring, some individuals are likely to experience a strong emotional response. In other words, to the extent to which individuals mentally simulate highly negative consequences of an event, they are likely to experience significant worry regardless of that event's probability. Our novel prediction over a variable-centered approach is that there are some individuals for whom job loss would be so catastrophic that they experience levels of affective JI greater than their cognitive JI. This prediction is supported by research in future-oriented cognition (e.g., Slovic & Peters, 2006; Spzunar et al., 2014), which distinguishes between a person's simulations regarding the

likelihood of an event occurring (in our case, job loss) and the simulated imagery associated with a potential event occurring. This suggests that there may be individuals who worry about what a hypothetical future might look like even if they perceive it as less likely to happen (Jacobson, 1991).

### **Hypothesis 1:**

Profiles will emerge that are characterized by quantitative and qualitative differences in levels of cognitive and affective job insecurity.

## **Economic Job Dependence and Profile Membership**

The benefits of person-centered research involve not only identifying heterogeneity in people's experiences on a specific set of variables, but also uncovering factors that may help distinguish and provide insight into these different patterns of experience (Gabriel et al., 2015; Morin et al., 2018). In the job insecurity literature, Greenhalgh & Rosenblatt (1984) and others (e.g., Cheng & Chan, 2008) have suggested that people's experiences related to job insecurity are likely shaped by factors that create more or less economic dependence on the job. Although some variable-centered research has examined constructs indicative of economic job dependence (e.g., employability), these studies have tended to combine affective and cognitive JI and had yet to consider that people with differing levels of economic job dependence might experience patterns of cognitive and affective JI in both quantitatively and qualitatively different ways.

Our proposition that economic job dependence factors may relate to heterogeneity in affective and cognitive JI profile membership stems from previously discussed research on future oriented thinking and how people generate simulations of future events. Szpunar et al. (2014) argued that individuals' personal experiences influence the possibilities that they simulate, such that people leverage their learned knowledge of the way the world works to generate possibilities for their future (see also Hassabis & Maguire, 2007; Szpunar & McDermott, 2008). In this vein, having more personal or relevant considerations in a given context not only enhances the chances that people simulate certain events but also shapes the nature of hypothetical futures that people imagine. Applying these arguments to JI, we suggest that people's levels of economic job dependence reflect their personal experiences and the perceptual lens through which they view events, and in turn, the types of job loss scenarios that they may simulate. Indeed, Greenhalgh and Rosenblatt (1984) made similar arguments when they suggested that economic job dependence could shape people's perceptions of the severity of threats to their jobs as well as their powerlessness in a threat situation, which could translate to the perceived likelihood of threat. Thus, economic job dependence may function as a relevant mental framework that shapes how people think and worry about job loss as a potential future event.

Our research examines four potential predictors of profile membership related to economic job dependence available in the ISSP dataset: education, perceived employability, contribution of one's income to the household income (i.e., percentage of household income one is personally responsible for), and perceived socioeconomic status. Together, these capture objective and subjective indicators of economic job dependence. The choice of

these four variables also aligns with Greenhalgh and Rosenblatt's (1984) contention that mobility and economic factors create situations wherein the consequences of losing one's job may be quite severe, making economically job dependent individuals acutely aware of the risk of detrimental outcomes should they lose their jobs. Although some studies have sought to examine job dependency factors as potential moderators of JI's effects (e.g., Ritcher et al., 2013; Sora et al., 2010), our focus is on the main effects of these factors in explaining variability in employees' JI experiences. Therefore, we extend job dependence theory by suggesting that job dependency factors are relevant personal lenses through that shape how employees experience constellations of affective and cognitive JI, and may be particularly useful for differentiating between individuals who experience profiles of JI dominated by affective reactions (i.e., worry), and others are less concerned. The following sections describe each factor.

### **Perceived Employability**

Perceived employability is defined as "the individual's perception of his or her possibilities to achieve a new job" (Berntson & Marklund, 2007, pg. 281). Perceptions of employability capture individuals' views of their personal adaptability, career identity, and social and human capital as well as view of how these KSAs create an advantageous status in their current labor market (Fugate et al., 2002; Vanhercke et al., 2014). Forrier et al. (2018) suggest that perceptions of employability serve as currently-held future-focused judgments. The self-perception of high employability can be viewed as a positive labor market feature that can prompt employees to take an active approach towards any perceived job insecurity (De Cuyper et al., 2012). In contrast, people with lower perceptions of employability perceive fewer "'possibilities' of employment" and are acutely aware of their economic dependence on their current position (Ito & Brotheridge, 2007; Marx, 2014; Vanhercke et al., 2014, p. 595). Those who perceive themselves to be less employable view job loss as potentially more catastrophic and difficult to overcome (Forrier et al., 2018), and indeed research suggests that this is the case (Marx, 2014; Vanhercke et al., 2014). Thus, perceived employability may help differentiate groups of individuals who experience profiles of job insecurity categorized by affect dominance from those in other profiles (Farber, 2017; Ito & Brotheridge, 2007).

### **Education**

Similarly, individuals' education may help explain patterns of cognitive and affective JI (Anderson & Pontusson, 2007; Hachen, 1990). Autor (2010) and others (e.g., Hout, 2012; Goldin & Katz, 2007) describe how labor markets are increasingly valuing greater education, both in terms of opportunities afforded to those with higher levels of education as well as rewards such as income. Indeed, research on the 2008 Great Recession found that those with lower education faced greater difficulty in replacing their job following job loss (Gangl, 2006; Hout et al., 2012). Similarly, utilizing data capturing job losses from 1981–2015, Farber (2017) found that more educated workers were more likely to be employed after a job loss, and subsequently more likely to be working full-time as opposed to involuntarily part-time. Not only is job loss riskier among those with lower education, individuals with lower levels of education may be acutely aware of this risk. For example, given that friendships and familial relationships tend to sort by education levels (Blossfeld,



2008), individuals with lower education may know of individuals similar to them who have struggled with devastating consequences of job loss. It is thus likely that some individuals with lower education have rich imagery about the negative potential consequences of job loss. Drawing from theory on future oriented cognition (Szpunar et al., 2014), we argue that individuals lower in education are more likely to simulate imagery that is episodic (i.e., specific and biographical) in nature in response to perceived insecurity, as compared to individuals higher in education who may engage in more semantic (i.e., abstract state of world) simulations. Such episodic affective imagery makes those potential consequences seem more tangible and worrisome, thereby suggesting that differing levels of education may help explain differing JI experiences.

### Household Contribution

Household contribution ratio reflects an individual's income relative to their household's income (Tichenor, 2005). Individuals who are the sole income earners for their household have a high household income ratio and rely heavily on this earner's income to maintain their standard of living, whereas households with multiple sources of income rely less on each individual's earning (Richter et al., 2014). Job loss for individuals responsible for a greater percentage of the household income holds more severe consequences for them and their families. These individuals may simulate strong, negative images associated with potential job loss because they are aware of how much of their/their families' needs are dependent on their abilities to maintain their jobs (Falconier & Jackson, 2020; Voydanoff & Donnelly, 1989). Furthermore, research has shown that individuals are keenly aware of their degree of economic dependence and highlight the role this dependence has on feelings of job loss (Rosenblatt & Keller, 1983). Indeed, research suggests that those who perceive more responsibility for an outcome (in our case, providing for the family) experience greater preoccupation with simulations about potential negative events (e.g., effects on family functioning, inability to meet financial demands) (Kai, 1996).

### Perceived Socioeconomic Status

Perceived socioeconomic status (SES) refers to an individual's perceived standing in a social hierarchy and reflects one's appraisal of social status relative to others (Adler et al., 2000). In general, low SES has been linked with poor psychological and physical health outcomes; however, perceived SES has been found to relate to health outcomes more strongly than objective SES (i.e., a composite of education, income, and occupation) (Adler et al., 2000, Singh-Manoux et al., 2005). This is because, unlike objective SES, one's perception of their relative standing in a social hierarchy also encompasses their assessment of their past as well as future prospects (Singh-Manoux et al., 2005). Higher SES individuals may not be as likely to associate consequences of job loss with negative imagery as they may be better equipped to deal with job loss (Destin et al., 2017; McLeod & Kessler, 1990). Indeed, Abebe and Alvarado (2018) argued that individuals with greater perceived social status may even view job loss as a blessing that allows them to explore and pursue alternative work endeavors. In contrast, given the lack of economic and social resources at the disposal of lower perceived SES individuals, the consequences of job loss would pose a substantial negative event from which it would be hard to recuperate (Moncada et al., 2010; Stenland, 2000). Additionally, people who view themselves on the lowest rungs of society feel barely

connected to society and are likely quite sensitive to scenarios (such as job loss) that would put this already tenuous connection at greater risk (Brand, 2015). This perspective is in line with recent social identity work from Selenko and colleagues (2017) who found strong empirical evidence suggesting that employees who worry significantly about potential job loss (e.g., affective JI) have already begun anticipating membership in a negatively evaluated group (e.g., unemployed). Taken together, this line of reasoning suggests many lower SES individuals may be prone to significant worry about job loss due to lack of social and labor market resources.

In sum, it seems likely that perceived employability, education, contribution to household income, and perceived SES may help differentiate workers' profiles of cognitive and affective JI, and particularly may help understand who experiences profiles marked by exceeding worry as compared with other potential profiles that may emerge from the data. Thus, we explore these factors as potential predictors of profile membership. Because profile analysis is a hybrid inductive/deductive approach wherein conceivably qualitatively different versions of quantitatively different profiles could emerge, in line with other studies using person-centered analyses (e.g., Blustein et al., 2020; Gabriel et al., 2015), we offer an overarching hypothesis stating our expectation that these variables would help explain profile membership in conceptually meaningful ways.

**Hypothesis 2a-d:** (a) Perceived employability, (b) education, (c) household contribution ratio, and (d) perceived SES will predict profile membership.

## Profile Membership & Work Strain

Work strain captures domain-specific strain that arises due to workplace stressors (Jex & Beehr, 1991), and has been assessed in a variety of ways ranging from individuals' perceived stress (e.g., Chung, 2018; Ng & Jeffery, 2003) to burnout (e.g., Borgogni et al., 2012; Crawford et al., 2010) and other indicators of work-related mental distress (e.g., Calnan et al., 2000; Jex & Beehr, 1991; Mäkikangas & Kinnunen, 2003). Work strain is a frequently studied outcome within the JI literature; however, meta-analyses have revealed significant heterogeneity in results across samples (Jiang & Lavaysse, 2018; Sverke et al., 2002).

Future-oriented cognition is relevant for understanding the development of work strain as a result of JI constellations because peoples' expectations and worries about the future are related to how they cope with events and the strain outcomes they experience (Aspinwall, 2005; Aspinwall et al., 2005). Mental simulations allow people to envision the future and consider plans or possibilities for future events. This can help people process the details of a stressor and engage in problem-solving activities to proactively cope with it, such as planning (Rivkin & Taylor, 1998; Taylor & Schneider, 1989). Meanwhile, when the nature of these simulations poses a threat to an individual's ability to proactively cope (e.g., high perceived uncertainty accompanied by negative affect imagery), this may hinder an individual's capacity to manage stressors. Thus, envisioning future events could be beneficial or harmful for reducing strain, depending on the nature of mental simulations (Taylor & Schneider, 1989).



As stated earlier, the JI scenarios that people simulate can vary considerably in terms of severity and likelihood. Some situations are more uncertain than others and being uncertain about whether one will lose one's job is a different situation from believing there is a very high likelihood that one will lose one's job (De Witte, 1999; Shoss, 2017). In this sense, it has been argued that the highest levels of uncertainty are captured in the middle points of a likelihood scale (i.e., midpoint of measures of cognitive JI) rather than the end (Shoss, 2017). Individuals in the latter situation are more readily available to begin planning for being laid off and the future unemployment. However, individuals in circumstances characterized by greater uncertainty may struggle to plan for potential losses because they have high levels of uncertainty whether loss will even occur. This line of reasoning has been used to explain why JI can be such a harmful stressor (De Witte, 1999), and its impact should be particularly profound to the extent to which uncertainty is high and the consequences are potentially most severe (Ashford et al., 1989; Greenhalgh & Rosenblatt, 1984; Probst, 2003).

These different responses highlight the potential for a person-centered approach to help explain observed heterogeneity in work strain as an outcome of JI (Wang & Hanges, 2011). Specifically, because profiles can simultaneously capture differing levels and combinations of uncertainty and worry, they may help differentiate groups of workers who experience more or less work strain (Wang & Hanges, 2011). Based on the logic above, we argue that the patterns of mental simulations that are captured by profiles of cognitive and affective JI will prompt differential strain reactions, and particularly that members of profiles marked by combinations of worry with uncertainty may have markedly different levels of strain as compared with other potential profiles.

### **Hypothesis 3.**

JI profiles will be associated with different levels of work strain.

## **Method**

### **Procedures**

The data used in this study were collected as part of the International Social Survey Programme (ISSP Research Group, 2017). This cross-national collaboration examines a variety of social science topics from about 50 countries. One of the main benefits of using the ISSP data is the representativeness of the sample in comparison to a country's overall workforce due to a multi-step stratified random sampling approach. Representative data helps identify meaningful profiles of individuals along cognitive and affective JI. As the ISSP captures a wide variety of variables, it is also useful for identifying correlates of these profiles.

The present study used measures from the 2015 Work Orientations module, which focused on work related issues (ISSP Research Group, 2017). Because of the representativeness of the sample, several researchers have used previous Work Orientation modules to examine issues related to job insecurity and work (e.g., Jiang & Probst, 2017; Probst & Jiang, 2017; Shoss et al., 2019). We analyzed data from the US sample (Sample 1) first and then sought

to replicate the results using a UK sample (Sample 2). We present the results together for simplicity.

### Sample 1: United States

The 2015 Work Orientations module included a total of 1477 US survey respondents. Similar to Gabriel et al. (2015), listwise deletion was implemented to address missing data. 934 participants were included in the final analyses. Of these participants, about half (49.8%) were female, and the mean age was 43.19 ( $SD= 13.99$ ) years. Respondents reported completing on average 14.14 ( $SD= 2.98$ ) years of schooling. The average number of weekly hours worked was 39.25 hours ( $SD= 17.63$ ). In line with the goals of the ISSP, our final sample demographics were representative of the overall US labor force (ISSP Research Group, 2017), and the use of sampling weights further supports generalizability. Because the ISSP is representative of the workforce, the occupations represented vary considerably. Commonly reported occupations included health care assistants (2.6%), manufacturing laborers (2.6%), shop supervisors (2.3%), and business services and administration managers (2.1%). Means, standard deviations, and correlations of the variables in the US sample are in Table 1 below the diagonal.

### Sample 2: United Kingdom

We sought to replicate the results from our US sample using a UK sample. UK labor policies and macroeconomic conditions are shown to be similar to the US, and thus a UK sample is useful in replication of latent profile results from our US sample (Bell & Blanchflower, 2020). Similar to our US sample, our UK sample is representative of the overall UK workforce (ISSP Research Group, 2017). 937 participants were included in the final analysis. Of these participants, about half (51.2%) were female, and the mean age was 44.27 years old ( $SD= 11.96$ ). Respondents had an average of 13.55 ( $SD= 3.05$ ) years of education. Commonly reported occupations were shop sales assistants (6.2%), home-based personal care workers (4.1%), clerical support workers (3.9%), and secretaries (3.2%). Means, standard deviations, and correlations from the UK sample are in Table 1 above the diagonal.

### Measures

**Cognitive Job Insecurity.**—A single item was utilized to measure cognitive JI, “My job is secure”, which was rated on a five-point Likert scale ranging from 1 “Strongly Agree” to 5 “Strongly Disagree”, with higher scores indicating higher feelings of cognitive JI. Several studies have asserted that this item captures cognitive JI (e.g., Anderson & Pontusson, 2007; Jiang & Probst, 2017), and Debus et al. (2012) demonstrated that this item relates strongly to established measures of cognitive JI.

**Affective Job Insecurity.**—A single item was utilized to measure affective JI, “To what extent, if at all, do you worry about the possibility of losing your job?”, which was rated on a four-point Likert scale ranging from 1 “I worry a great deal” to 4 “I don’t worry at all”. This item was reverse coded so that higher scores indicated higher feelings of affective JI. Several studies have utilized this item to capture feelings of affective JI (e.g., Anderson & Pontusson, 2007; Probst & Jiang, 2017).

**Perceived Employability.**—A single item was utilized to measure perceived employability, “How difficult or easy do you think it would be for you to find a job at least as good as your current one?”, which was rated on a five-point Likert scale ranging from 1 “Very Easy” to 5 “Very Difficult”. This item was reverse coded so that higher scores indicated higher perceived employability. This item was recently used to measure perceived employability (Shoss et al., 2019), and its relationship with job insecurity was similar to that in previous studies utilizing established measures (e.g., De Cuyper et al., 2012).

**Years of Education.**—Respondents indicated how many years of formal schooling they completed.

**Perceived Socioeconomic Status.**—A single item was utilized to capture perceived SES, “There are groups which tend to be toward the top and groups which tend to be toward the bottom....where would you put yourself on this scale?”, which was rated on a ten-point scale ranging from 1 “Lowest, Bottom, 01” to 10 “Highest, Top, 10”. Specifically, this item aims to capture where individuals would subjectively place themselves among a social hierarchy rung and has been used in past research (Adler et al., 2000; Kraus et al., 2013). This variable was only available in our US sample.

**Household Income Contribution.**—Following Richter et al. (2014) and Sora et al. (2010), household income contribution was captured by calculating the proportion of personal income relative to reported household income. Because the ISSP asks personal and household income using ranges, respondents were assigned the mid-point of the range they indicated.

**Work Strain.**—A single item was utilized to measure work strain, “How often do you find your work stressful?”, which was rated on a 5-point frequency scale ranging from 1 “Always” to 5 “Never”. The item was reverse coded so that higher scores indicated greater work strain. Although a single item of work strain is not ideal, this item has been used by previous research to examine work strain (e.g., Rogelberg et al., 2010).

## Analytic Approach

We utilized latent profile analysis to conduct our analyses. Latent profile analysis is a person-centered approach within the group of mixture models which uses continuous variables as indicators to determine profile membership that maximizes the probability of precisely describing the individuals in the sample (Meyer et al., 2013; Meyer & Morin, 2016). Latent profile analysis has unique benefits not shared with some other person-centered approaches (e.g., classical cluster analysis), and is a model-based approach which utilizes statistical criteria to determine the best fitting model and number of profiles which should be analyzed (Meyer & Morin, 2016). Another unique advantage associated with latent profile analysis is the ability to directly integrate predictors and outcomes as covariates into the model in order to assess relationships with profile membership (Morin et al., 2018). Additionally, latent profile analysis allows for the examination of continuous, ordinal, and categorical covariates within the same model (Morin et al., 2018). These

benefits make latent profile analysis one of the more powerful person-centered research analytical techniques (Meyer et al., 2013).

We used an advanced 3-step approach of mixture modeling with auxiliary variables (Asparouhov & Muthén, 2014) to estimate latent profiles of job insecurity and to examine the relationships between latent profiles and covariates using Mplus 8.1 (Muthén & Muthén, 1998–2017). In our analyses, we incorporated the ISSP sampling weight, because the under- or over-sampling of certain groups may affect parameter estimates, standard errors, and tests of model fit (Muthén, 2006). The 3-step approach begins by estimating the latent profile model using only indicators, then calculates the most likely profile membership based on the posterior distribution obtained during the latent profile estimation. Antecedents can be integrated (using the R3STEP command in Mplus), via a series of multinomial logistic regression models to assess the extent to which these variables impact the odds of belonging to one profile over another (Asparouhov & Muthén, 2014). Outcomes were examined (using the DCON command in Mplus) to determine whether the profiles are significantly different from each other with regard to work strain. The 3-step approach has been shown to perform better than other approaches of latent profile analysis (e.g., a 1-step approach) in terms of bias, mean squared error, and confidence interval coverage (Asparouhov & Muthén, 2014). Estimation of the latent profiles was done via the mixture modeling procedure with the robust maximum likelihood (MLR) estimator.

Following the recommendations provided by Nylund et al., (2007), the number of profiles were iteratively specified and compared along several fit statistics. These included, the 1) Lo-Mendell-Rubin Likelihood Ratio Test (LMRT; Lo et al., 2001), which provides a  $p$  value to indicate the extent to which adding one more profiles significantly improves model fit or not, 2) the Akaike information criterion (AIC), 3) the Bayesian information criterion (BIC), lower scores on AIC and BIC indicate better fitting solution, and 4) entropy, which indicates the distinctiveness of each profile, with values over 0.6 indicating good profile separation (Asparouhov & Muthén, 2014). In addition, to avoid choosing an overfitting model that extracted too many profiles, only models with each profile containing more than 5% of the sample size are considered (Merz & Roesch, 2011). The profiles that emerged following the latent profile analysis were plotted and interpreted based on the pattern of means across profile groups.

## Results

### Latent Profile Analyses

Table 2 provides the fit statistics for the possible latent profile structures for both US and UK samples. Models are examined with respect to the above-mentioned criteria, as well as overall quality and parsimony. These analyses suggested a three-profile solution, which displayed significantly better fit than the one-, two-, or four-profile solutions. Specifically, results of the LMRT comparing the three- and two-profile models indicated that the additional profile improved overall fit (i.e., the three-profile solution fit significantly better than the two-profile solution,  $p < .01$ ). Furthermore, decreasing AIC and BIC values suggest better overall fit for a 3-profile solution as compared to 2-profile solution. Although AIC, BIC and LMRT values support the 4-profile solution, the 4-profile solutions contained a

profile that were too small to be of substantive value (2.82% of the US sample; 0.64% of the UK sample) and is considered as a spurious profile (i.e., less than 5% of the sample). The 4-profile solution might be overfitting the data while the results of a 3-profile model might be more stable (Hipp & Bauer, 2006). Therefore, we choose the 3-profile solution. Finally, our decision to use the three-profile solution was buttressed by prior research that has supported the emergence of more profiles than indicator variables (Gellatly et al., 2014).

The means and standard deviations of both US and UK job insecurity profiles are shown in Table 3. Consistent with Hypothesis 1, the three-profile solution for our US sample identified a secure alignment profile, an affective JI misalignment profile, and an ambivalent JI alignment profile. These JI profiles are reflective of both qualitative and quantitative differences. In the US, the secure alignment profile ( $n=526$ , 56.30% of the sample) is characterized by employees who report perceiving their job to be secure (cognitive JI  $M=1.68$ ,  $SD=0.92$ , on a 5-point scale), and do not worry about losing their jobs (affective JI  $M=1.00$ ,  $SD=0.19$ , on a 4-point scale). The affective JI misalignment profile ( $n=149$ , 15.95% of the sample) is made up of employees who are somewhat unsure regarding perceptions of job security (cognitive JI  $M=2.72$ ,  $SD=0.92$ , on a 5 point-scale). However, they report worrying considerably about losing their jobs (affective JI  $M=3.39$ ,  $SD=0.19$ , on a 4-point scale). The ambivalent JI alignment profile ( $n=259$ , 27.75%) is also characterized by employees who are somewhat unsure regarding perceptions of job security (cognitive JI  $M=2.32$ ,  $SD=0.92$ , on a 5 point scale), however, these employees only report worrying a little bit about potential job loss, affective JI ( $M=2.00$ ,  $SD=0.19$ , on a 4 point scale). Figure 1 shows each profile expressed in terms of unstandardized job insecurity scores.

Using the same fit criteria from the US sample, we found that the three-profile solution was the best fit for the UK data. All the fit criteria support the 3-profile solution: AIC and BIC of 3-profile solution are smaller than those of 4-profile solution, and LMRT shows 4-profile solution doesn't significantly improve the fit compared with 3-profile solution. As shown in Table 3, the profiles that emerged from the UK sample resembled those from the US sample, with a secure alignment profile, an affective JI misalignment profile, and an ambivalent JI alignment profile. The secure alignment profile ( $n=362$ , 38.59%) is characterized by employees who report perceiving their job to be secure (cognitive JI  $M=1.99$ ,  $SD=0.93$ , on a 5-point scale), and do not worry about losing their jobs (affective JI  $M=1.00$ ,  $SD=0.23$ , on a 4-point scale). The affective JI misalignment profile ( $n=239$ , 25.51%) is made up of employees who are somewhat unsure regarding perceptions of job security (cognitive JI  $M=2.81$ ,  $SD=0.93$ , on a 5-point scale), however, they report worrying considerably about losing their jobs (affective JI  $M=3.28$ ,  $SD=0.23$ , on a 4-point scale). The ambivalent alignment JI profile ( $n=336$ , 35.90%) is also characterized by employees who are somewhat unsure regarding perceptions of job security (cognitive JI  $M=2.32$ ,  $SD=0.93$ , on a 5-point scale), however, these employees only report worrying a little bit about potential job loss (affective JI  $M=2.00$ ,  $SD=0.23$ , on a 4-point scale). Figure 2 shows each profile expressed in terms of unstandardized job insecurity scores.

### Antecedents and Outcomes of Latent Profiles - US

In terms of antecedents for the US sample, those higher in perceived employability were more likely to be in the secure profile compared to the ambivalent or affective misalignment profiles and are more likely to be in the ambivalent profile compared to the affective misalignment profile (see table 4 for the multinomial logistic regression analysis). Additionally, those with more years of education and perceived socioeconomic status were more likely to be in the secure profile compared to the affective misalignment profile. However, we did not find support for household income contribution as an antecedent of JI profile membership. Taken together, this suggests that those in the secure profile are more likely to think that they would be able to find a job at least as good as their current one, are more educated, and perceive that they are among higher groups in the social stratum than those in other profiles. These findings align with the conceptual logic articulated above and Hypotheses 2a, b, and d.

For our work strain outcome, those in the secure alignment reported the least work strain ( $M=3.12$ ,  $SE=0.04$ ), followed by those in the ambivalent alignment group ( $M= 3.24$ ,  $SE=0.06$ ). Each of these profiles reported significantly less work strain compared to the affective misalignment group ( $M=3.54$ ,  $SE=0.08$ ), providing support for Hypothesis 3's prediction that profile membership can help explain variability in work strain. Table 5 summarizes the equality of means analysis, highlighting the differences in work strain across profiles.

Finally, we tested whether regression analyses would have yielded similar results as our LPA analyses with regard to well-being outcomes (e.g., Gabriel et al., 2015). As shown in Table 6, regression analyses from the US sample, the effect of cognitive JI on work strain was not significant ( $b=0.05$ ,  $p=.17$ ). In contrast, a significant positive relationship was found between affective JI and work strain ( $b=0.15$ ,  $p<.001$ ). The interaction effect between cognitive JI and affective JI was not significant in predicting work strain ( $b=0.02$ ,  $p=.50$ ). Thus, if we had used a variable-centered approach, we would have concluded that cognitive and affective JI do not interact to affect general well-being indicators and mixed findings at best in regard to direct effects. With a person-centered approach, we have found evidence to suggest that there are distinct subpopulations of employees based on different constellations of JI, and these subpopulations significantly differ in regard to work strain.

### Antecedents and Outcomes of Latent Profiles - UK Replication

In line with the results from the US sample, those higher in perceived employability were more likely to be in the secure alignment profile than either the ambivalent alignment or affective misalignment profiles and are more likely to be in the ambivalent profile than the affective misalignment profile. However, neither education nor household income contribution were found to predict membership in JI profiles. These findings align with the conceptual logic articulated above and Hypotheses 2a. Table 4 summarizes this analysis.

For our work strain outcome, those in the secure alignment profile again reported the least work strain ( $M=3.08$ ,  $SE=0.05$ ), followed by the ambivalent alignment profile ( $M= 3.27$ ,  $SE=0.05$ ). In line with results from the US sample, each of these profiles reported



significantly less work strain compared to the affective misalignment profile ( $M=3.54$ ,  $SE=0.05$ ), providing support for Hypothesis 3's prediction that profile membership is relevant for work strain.

We also tested the extent to which regression analyses would have yielded similar results as our LPA analyses with regard to work strain. As shown in Table 6, regression analyses from the UK sample showed significant negative relations between cognitive JI and work strain ( $b = -0.07$ ,  $p = .03$ ) as well as a positive relationship between affective JI and work strain ( $b = 0.22$ ,  $p < .001$ ). Further, the interaction effect between cognitive JI and affective JI was not significant in predicting work strain ( $b = 0.06$ ,  $p = .05$ ). Thus, if we had used a variable-centered approach to this research, we would have concluded that cognitive and affective JI do not interact to affect general well-being indicators.

## Discussion

Drawing from the literature on future-oriented cognition, our paper presents a novel perspective on job insecurity experiences. Specifically, our research suggests that there are meaningful patterns in how people simultaneously experience cognitive and affective JI and these patterns have implications for understanding (a) the experiences of different subgroups of workers that shape the profiles, as well as (b) heterogeneity in work strain as an outcome of JI. We uncovered several distinct profiles of cognitive and affective JI across both US and UK samples: secure alignment, ambivalent JI alignment profile, and affective JI misalignment. Individuals in the secure alignment profile did not perceive their jobs to be threatened nor were they worried about job loss. The ambivalent JI alignment profile was characterized by a low-moderate perception of loss and small degree of worrying. Finally, individuals in the affective JI misalignment profile reported moderate insecurity perceptions along with a high degree of worrying. Our identification of both aligned (similar levels of cognitive and affective JI) and misaligned (affective JI either greater or less than JI cognitive) profiles provide insight into the heterogeneity of the job insecurity experience among workers and identify a specific job insecurity experience (affective JI greater than cognitive JI) that could not otherwise be identified through a variable centered approach.

The emergence of both alignment and misalignment profiles advances the job insecurity literature by suggesting that employees do not always experience affective JI to a similar degree that they experience cognitive JI. Rather, many employees in our samples were prone to worrying a great deal about their job security while viewing loss as less likely to happen (15.95% in the US, 25.51% in the UK). This novel finding suggests that the JI literature would benefit from re-thinking the assumption that affective JI would necessarily be in line with or lower than cognitive JI. In this vein, the emergence of distinct qualitatively and quantitatively different JI profiles further lends empirical support for theorizing in future-oriented cognition (e.g., Loewenstein et al., 2001; Szpunar et al., 2014) as profiles revealed in the current study suggest cognitive and affective JI are separate future-focused simulations that can be experienced simultaneously in distinct constellations.

Furthermore, our profile results suggest these JI constellations can vary across various subgroups of individuals and thereby explain heterogeneity in how different subgroups of

employees experience JI. In particular, our results suggest economic job dependence factors are critical in understanding how individuals' JI experiences are shaped. In the US sample, high levels of perceived employability, education, and perceived SES enabled individuals to experience secure alignment and served to protect against affective misalignment. Consistent with theory on economic job dependency and research on these respective variables, these findings suggest that factors were essential in mitigating the worry attached with simulated negative imagery as a result of potential job loss. In our UK sample, perceived employability was the only significant economic job dependence antecedent that predicted membership in the low affect JI profiles (e.g., secure alignment, ambivalent alignment). In contrast to our hypothesis, income contribution was not a significant predictor of JI profiles (e.g., affective JI misalignment) across both the US and UK samples. Although surprising from a conceptual perspective, previous studies have found contrasting empirical results regarding income contribution as a job dependence factor (e.g., Cheng & Chan, 2008).

With regard to outcomes, our findings from both with the US and UK samples suggest membership in the affective JI misalignment profile was associated with greater work strain as compared to membership in the other JI profiles. These findings are in line with previous theorizing on future-oriented cognition and individuals' ability to plan in the face of a perceived impending threat (Aspinwall & Taylor, 1997; Taylor & Schneider, 1989). Specifically, our findings provide support for the proposition that individuals may experience worse well-being effects to the extent they are highly worried about an event that may or may not occur. Although we are unable to test specific mechanisms, this is theorized to occur because it is quite difficult for individuals to effectively plan and cope with an event, they are highly worried about, yet are unsure will actually happen (Aspinwall & Taylor, 1997; Taylor & Schneider, 1989). Taken together, these findings highlight the importance of understanding how individuals simultaneously experience both cognitive and affective JI as specific constellations (e.g., affective JI misalignment higher affective than cognitive JI) may have deleterious effects for employees. Our supplementary analyses demonstrated that these findings would not have been obtained with traditional variable-centered regression analyses.

Although the US and UK have many similarities, several differences may help explain differences in the findings regarding education and perceived SES. Autor (2010) notes an increasing wage gap in the US along education lines. Additionally, this ever-increasing gap is also evident in non-wage benefits (e.g., health insurance and sick time). In contrast, the access to benefits may not sort as clearly along education lines in the UK, and the UK has greater employment protection than the US (Belot et al., 2007). Thus, lower education and perceived SES may be more significant economic job dependency factors in the US than in the UK.

### **Theoretical Implications**

The present study suggests that cognitive and affective JI will manifest in different patterns among employees. Our profiles of affective JI and cognitive JI is consistent with theory on future-oriented cognition and affect (Baumgartner et al., 2008; Slovic & Peters, 2006; Szpunar et al., 2014), which does not frame emotions as a direct outcome of individuals'

predictions about the future. Rather, affect and predictions are independent reactions to people's simulations. As a result, people may worry about events even if they are unlikely to happen. In the present study, this is evidenced by the emergence of alignment profiles as well as a misalignment profile in which individuals were significantly worried about job loss even when it was not perceived as imminent. From a broader perspective, this research points to the importance of JI literature to both be informed by and to inform the broader literature on future-oriented cognition. JI can be thought of as a domain-specific form of prospection, with cognitive JI representing prediction and affective JI representing anticipatory affect. Future researchers may find it useful to apply a similar person-centered approach to investigate how different groups of people think and feel about other anticipated stressors.

It is particularly noteworthy that an affective misalignment profile emerged in both samples. This profile would not have been predicted from variable centered research and suggests that the assumption put forth from variable-centered job insecurity research that cognitive JI creates a ceiling for affective JI (e.g., that affective JI is endogenous to cognitive JI) is likely misguided. Rather than examining affective JI as a mediator or a competing predictor with cognitive JI, JI theory may be better suited by recognizing that varying combinations of affective and cognitive JI are not only possible but conceptually meaningful. Additionally, the conceptualization that cognitive and affective JI can be viewed as reflecting separate mental processes related to people's views about potential job loss, may also be used to generate theory about additional predictors and outcomes of JI experiences.

It is interesting that our study did not uncover two profiles that would be predicted by variable-centered research: a high cognitive JI- high affective JI profile or a high cognitive-low affective JI profile (Jiang & Lavaysse, 2018; Probst, 2003). It may be that these combinations are relatively rare or occur only in specific fleeting circumstances (e.g., an announced layoff). Additionally, those who experience high cognitive JI (regardless of the combination with affective JI) may indeed lose or leave (Cheng & Chan, 2008; Kinnunen et al., 2014; Sverke et al., 2002) their jobs. This line of explanation is somewhat supported in our data, which revealed a cognitive-dominant JI misalignment profile when testing a 4-profile solution. However, as mentioned earlier, this model was not retained as the percentage of observations in this profile, 3% ( $n= 29$ ), fell short of the 5% of the recommended sample size threshold (Hipp & Bauer, 2006; Merz & Roesch, 2011).

Our findings help advance discussions about economic job dependencies and suggest that some variables that tap into workers' economic job dependence can help distinguish membership among different JI profiles, especially in the U.S. Building from theory on job dependence (Greenhalgh & Rosenblatt, 1984), we reasoned that some employees would simulate strong emotional images when they imagined the consequences of job loss. Our findings help shed light that lower levels of economic job dependence (especially captured by perceived employability) can serve as protective functions. Moreover, the question of whether perceived employability is a predictor of or substitute for job insecurity has been a long-standing debate in the JI literature. De Cuyper et al., (2008) argued that "employability may be a means to secure one's labour market position, rather than a means to cope with job insecurity" (pg. 488), and longitudinal work supports this directionality (De Cuyper et

al., 2012). Our findings offer a nuanced view to that perspective—whereas higher perceived employability may be protective and enable individuals to perceive a lower likelihood of job loss and less worry, those with lower perceived employability may be more likely to experience uncertainty about the future of their jobs and exceeding levels of worry.

Our findings also hold relevance for theory about JI's effects. A common question in JI research aims to address for whom JI is most harmful (Cheng & Chan, 2008). Our research suggests that it is the characteristics of JI that may yield particular harm, especially in cases where people experience considerable uncertainty over job loss coupled with higher levels of worry (i.e., our affective misalignment group). This finding is in line with research on anticipated threats and future-oriented cognition (e.g., Aspinwall & Taylor, 1997; Taylor & Schneider, 1989) and points to the need to consider individuals' abilities to pre-emptively cope when understanding strain outcomes of job insecurity. In this vein, we encourage future JI work to take into account both uncertainty over job loss and severity of potential consequences in seeking to understand who suffers most from JI.

### Practical Implications

This study also has implications for practitioners. Most importantly, leaders should not assume that all employees will worry about the security of their job only in the presence of true threats. The increasing use of pulse surveys within organizations can be leveraged to understand employees' perceptions of threat and level of worrying. Further, by soliciting specific qualitative information from employees' regarding the issues that may be leading to these experiences, organizations can work with occupational health professionals to implement strategies which target the core issues prompting these negative JI experiences.

Moreover, leaders should note that some economic job dependence factors, such as perceived employability, will influence how employees experience JI. There is an on-going debate over the risks and benefits of organizations' efforts to enhance employability (e.g., through training, job rotation) (Nelissen et al., 2017). By demonstrating that perceived employability protects against more harmful forms of job insecurity, our findings present another piece of evidence in support of enhancing employability perceptions.

Organizations can also play an active role by developing primary intervention strategies (e.g., modifying organizational policies) that target the core issues (e.g., economic job dependence factors) influencing employee patterns of job insecurity (Landsbergis et al., 2014). For example, Bidwell and colleagues (2013) note that trends in income inequality and declining benefits provided to employees indicates ways by which organizational practices are shaping economic dependency. Previous research has shown that the increasing use of pay dispersion programs such as incentive pay and performance-based pay/ promotions contributes to rising wage inequality, especially among those disadvantaged in the labor market, and may exacerbate the number of people who perceive lower SES (Elvira & Graham, 2002; Lemieux et al., 2009). Given the importance of perceived SES and education in shaping secure JI experiences in the U.S., primary interventions specifically targeted at modifying employee wage and benefit distribution and educational attainment could be worthwhile strategies for reducing employees' perceived economic job dependence (Landsbergis et al., 2014).

## Limitations and Future Directions

This study used data from the ISSP dataset that was collected using a multi-stage stratified random sampling approach, including participants from urban, suburban, and rural geographic areas. Therefore, the data used in the present study are highly representative of the workforce in the United States and in the United Kingdom. Though we conceptualize these samples as a strength of the current study, the data are self-rated, and originate from a single source. Cognitive and affective JI are necessarily perceptual constructs (Shoss, 2017). Those who are most privy to the subtle cues or triggers of job insecurity are the employees themselves, making self-report the most theoretically appropriate measurement source. Further, Conway and Lance (2010) demonstrated that same-method observed scores are more accurate representations of their true scores. However, future research might seek to examine these effects in studies that incorporate objective data or in quasi-experimental conditions.

The use of single-item measures in the present study may have reduced the reliability of our focal constructs. Prior research on job insecurity specifically has successfully utilized single-item measures from the ISSP (e.g., Debus et al., 2012; Shoss et al., 2019), and items have been shown to correlate highly with empirically established job insecurity scales (Debus et al., 2012). The use of our single-item work strain measure may pose some issues as the item is specific to stress at work, which in itself could represent experienced job insecurity. However, the correlation between our work strain measure and both cognitive JI (.11) and affective JI (.15) were fairly low, suggesting these measures were not assessing the same construct. Furthermore, although the use of single-item to measure perceived SES may not be ideal in capturing nuances of SES, it captures broad SES perceptions have been considered an acceptable measure for capturing SES (e.g., Adler et al., 2000; Kraus et al., 2013). Future research should seek to replicate the current study using multi-item scales that can capture greater richness in their assessment of JI profile antecedents and well-being outcomes.

Additionally, the sole utilization of US and UK survey respondents may decrease generalizability of results to other countries which differentiate in terms of labor market protections, culture (e.g., collectivist) and macro-economic conditions. The findings presented here provide a foundation for future studies to investigate these patterns in different cultural and economic contexts. Previous research has supported the role of national social safety protections as a buffer against the negative effects of job insecurity (Debus et al., 2012). In contrast, research has shown employees in collectivist cultures may be more greatly impacted by negative effects of job insecurity (Probst & Lawler, 2006). It would be interesting to examine how various country level factors may shape profile emergence. Additionally, it would be interesting to examine other potential predictors of profile membership, including psychological factors such as work-based self-esteem as well as personality traits (e.g., neuroticism).

Furthermore, although our results are in line with theorizing on future-oriented cognition and the negative effects that high uncertainty has on individuals ability to engage in proactive planning or coping efforts (e.g., Aspinwall et al., 2005; Spzunar et al., 2014), we were unable to explicitly test this mechanism by which cognitive and affective simulation

is theorized to lead to negative well-being effects. We encourage future research to build on the study of job insecurity as a future-focused phenomenon by testing potential mechanisms (e.g., proactive planning and coping) that might explain the effects of specific JI constellations on employee well-being.

Finally, the latent profiles and their correlates were based on the cross-sectional data. This limits our ability to draw causal conclusions regarding the direction of effects found. To this point, although we use the terms antecedents and outcomes to be clear about the theoretical positioning of the variables, the nature of our data precludes drawing conclusions about the conditions that are truly antecedent or consequent. In other words, our data can only provide a snapshot of the job insecurity profiles and the average characteristics of participants who experience each of those groups at a given point in time. Although this is helpful given that the idea of job insecurity profiles and differential profile membership is new to the job insecurity literature, it leaves us unable to address the temporal dynamics with regard to profile antecedents. Further, research has suggested that perceptions of one's job insecurity may change across time in accordance with changing economic and social contexts (Lübke & Erlinghagen, 2014). Future research should employ longitudinal data to help address both these limitations. Specifically, researchers should consider the role of latent profiles as mediators explaining the effects of economic job dependence factors on employee well-being outcomes over time.

## Conclusion

Building upon prior research regarding the distinctiveness of cognitive and affective JI, the current study provides support for the notion that a misalignment in these levels may arise. In particular, our study uncovered three distinct profiles which characterize different job insecurity experiences and are related to economic job dependence factors and work strain across both a US and UK sample. In doing so, this study demonstrates the benefits of adopting a person-centered approach to better understand the complexity of job insecurity processes.

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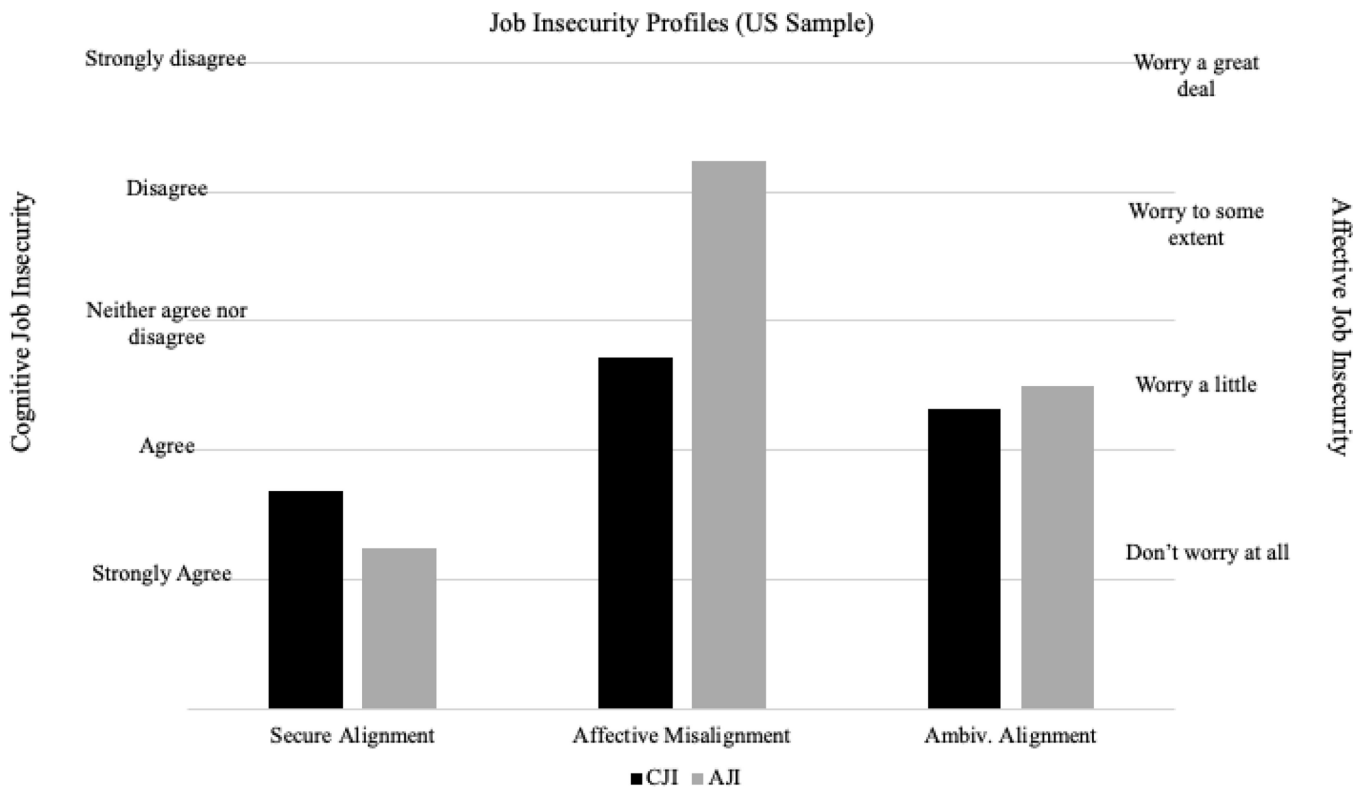
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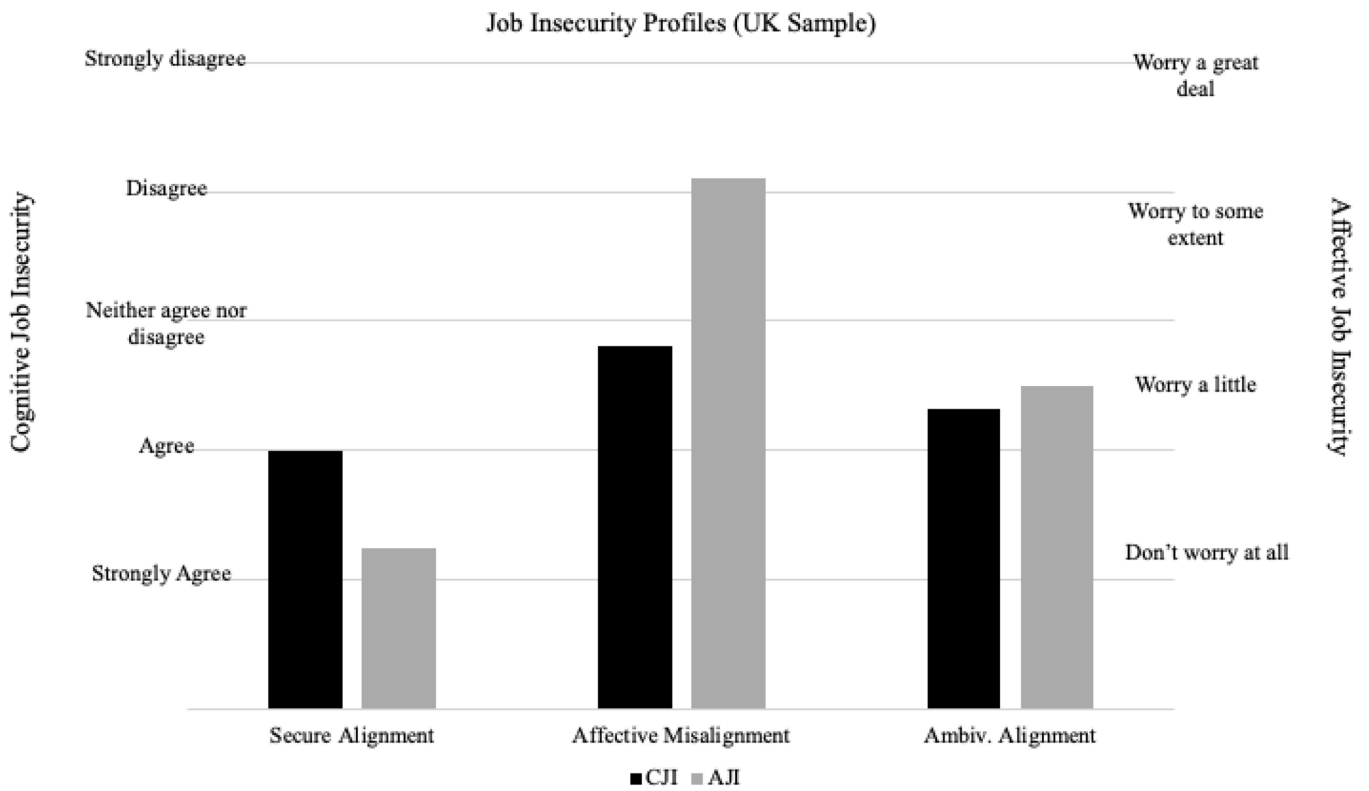
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**Figure 1.**  
 US job insecurity profiles  
*Note.* Cognitive JI (CJI) was measured on a 5-point Likert scale (“My job is secure”), whereas affective JI (AJI) was measured on a 4-point Likert scale (“To what extent, if at all, do you worry about the possibility of losing your job?”).





**Figure 2.**  
 UK job insecurity profiles  
*Note.* Cognitive JI (CJI) was measured on a 5-point Likert scale (“My job is secure”), whereas affective JI (AJI) was measured on a 4-point Likert scale (“To what extent, if at all, do you worry about the possibility of losing your job?”).

**Table 1.**

Descriptive statistics and correlations of Study 1 variables

Variable	US M (SD)	UK M (SD)	1	2	3	4	5	6	7	8	9	10
1. Age	43.19 (13.99)	44.27 (11.96)		-0.06	-0.03	0.17***	-0.02	-0.16***	-0.18***	0.08*	-	-0.14***
2. Gender	1.49 (0.50)	1.52 (0.50)	0.06		-0.31***	0.00	0.02	-0.05	0.00	-0.22***	-	-0.01
3. Work Hours	39.25 (17.63)	37.82 (16.21)	-0.09**	-0.18***		-0.02	0.09**	0.07*	0.04	0.31***	-	0.23***
4. CJI	2.02 (1.01)	2.33 (0.99)	0.08*	0.02	-0.02		0.38***	-0.07*	0.02	-0.06	-	0.03
5. AJI	1.64 (0.87)	1.97 (0.94)	0.02	0.00	0.08*	0.39***		0.15***	0.02	0.06	-	0.21***
6. Perceived Emp.	3.04 (1.24)	2.59 (1.14)	-0.15***	0.04	-0.04	-0.13***	-0.21***		0.08*	0.05	-	-0.02
7. Education	14.14 (2.98)	13.55 (3.05)	0.06	0.06	-0.02	0.00	-0.13***	0.02		-0.08*	-	0.06
8. Income Contrib.	0.58 (0.37)	0.55 (0.28)	0.12***	-0.14***	0.22***	0.01	0.03	-0.03	0.07*		-	0.14***
9. Perceived SES	6.19 (1.81)	-	0.10**	-0.06	0.05	-0.15***	-0.15***	0.09	0.22**	0.02		
10. Strain	3.21 (0.93)	3.31 (0.85)	-0.07*	0.04	0.23***	0.11**	0.15***	-0.01	0.05	0.11**	0.02	

Note. US intercorrelations are below the diagonal. UK intercorrelations are above the diagonal. CJI = Cognitive Job Insecurity. AJI = Affective Job Insecurity. Perceived Emp. = Perceived Employability. Income Contrib. = Household income contribution. Perceived SES = Perceived Socioeconomic Status.

\*\*\*  $p < .001$ ,

\*\*  $p < .01$ ,

\*  $p < .05$ .

**Table 2.**

## Model fit indices

No. of Profiles	LMRT ( $p$ )	AIC	BIC	Entropy
US Sample				
1		5098.41	5117.76	
2	438.86 (<.01)	4644.16	4678.04	0.96
3	693.86 (<.01)	3922.48	3970.87	1.00
4	37.39 (.32)	3889.27	3952.18	0.98
UK Sample				
1		5091.13	5110.50	
2	2537.43 (<.01)	4848.14	4882.03	0.79
3	430.071 (<.01)	4405.03	4453.45	0.99
4	-285.171 (.99)	4710.09	4773.04	0.82

Note. LMRT = Lo, Mendell, and Rubin (2001) test; AIC = Akaike information criteria; BIC = Bayesian information criteria.

**Table 3.**

Sample means (SD) and profile means (SD) for Study 1 and Study 2

Solution	<i>n</i>	CJI (SD)	AJI (SD)
US Sample			
Sample		2.03 (1.01)	1.66 (0.89)
Secure Alignment	526 (56.30%)	1.68 (0.92)	1.00 (0.19)
Affective Misalignment	149 (15.95%)	2.72 (0.92)	3.39 (0.19)
Ambivalent Alignment	259 (27.75%)	2.32 (0.92)	2.00 (0.19)
UK Sample			
Sample		2.32 (0.98)	1.95 (0.92)
Secure Alignment	362 (38.59%)	1.99 (0.93)	1.00 (0.23)
Affective Misalignment	239 (25.51%)	2.81 (0.93)	3.28 (0.23)
Ambivalent Alignment	336 (35.90%)	2.32 (0.93)	2.00 (0.23)

*Note.* CJI = Cognitive Job Insecurity. AJI = Affective Job Insecurity. In US and UK samples, CJI measured on a 5-point scale. AJI measured on a 4-point scale. In Study 2, CJI and AJI measured on 5-point scales.

Table 4.

Multinomial logistic regression results for Study 1.

Antecedent	Secure vs. Affective		Secure vs. Ambiv.		Affective vs. Ambiv.	
	Estimate (SE)	***	Estimate (SE)	**	Estimate (SE)	**
US Sample						
Perceived Emp.	0.47 (0.09)	***	0.21 (0.07)	**	-0.25 (0.10)	**
Years of Ed.	0.10 (0.04)	*	0.02 (0.03)		-0.08 (0.05)	
Perceived SES	0.13 (0.06)	*	0.08 (0.06)		-0.05 (0.07)	
Income Contrib.	-0.39 (0.31)		-0.37 (0.24)		0.02 (0.33)	
UK Sample						
Perceived Emp	0.32 (0.09)	**	0.12 (0.08)		-0.21 (0.10)	*
Years of Ed.	-0.05 (0.03)		-0.03 (0.03)		0.01 (0.03)	
Income Contrib.	-0.52 (0.39)		-0.63 (0.34)		-0.11 (0.38)	

Note. All values are estimates from the R3STEP logistic regression analysis. Positive values indicate greater likelihood of membership into the first class compared to the second class, and negative values indicate greater likelihood of membership into the second class as compared to first class. Ambiv. = Ambivalent. Perceived Emp. = Perceived Employability. Years of Ed. = Years of Education. Perceived SES = Perceived Socioeconomic Status. Income Contrib. = Household income contribution.

\*\*\*  
 $p < .001$ ,

\*\*  
 $p < .01$ ,

\*  
 $p < .05$ ,

**Table 5.**

## Equality of means

Sample/Outcome	Secure (A)	Affective (B)	Ambivalent (C)	Chi square
US Sample				
Strain	3.12 <sub>B</sub>	3.54 <sub>A, C</sub>	3.24 <sub>B</sub>	24.77 <sup>***</sup>
UK Sample				
Strain	3.08 <sub>B, C</sub>	3.54 <sub>A, C</sub>	3.27 <sub>A, B</sub>	41.62 <sup>***</sup>

*Note.* US Sample Size = 932. UK Sample Size = 934. All analyses were run using the DCON procedure in Mplus. The values for strain are means. Subscripts indicate profiles that are significantly different at  $p < .05$ . Secure = Secure alignment; Affective = Affective misalignment; Ambivalent = Ambivalent alignment.

<sup>\*\*\*</sup>  
 $p < .001$ .



**Table 6.**

Regression Results for US and UK Samples Predicting Strain and Job Satisfaction

Sample	Strain
	b (SE)
US Sample	
Cognitive JI (CJI)	0.15 (0.03)
Affective JI (AJI)	0.04*** (0.04)
CJI x AJI	0.02 (0.03)
UK Sample	
Cognitive JI (CJI)	-0.07* (0.03)
Affective JI (AJI)	0.22*** (0.03)
CJI x AJI	0.06 (0.03)

Note. US Sample size = 930. UK Sample size = 921. *SE* = standard error.

\*  
p<.05.

\*\*  
p<.01.

\*\*\*  
p<.001