

The Contingent Consequences of Job Insecurity: A Cross-National Investigation of the Effects of Job Insecurity, Employability, and Culture on Employee Outcomes

JOB INSECURITY, EMPLOYABILITY, AND CULTURE

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Abstract

This study investigated the combined effects of national culture and perceptions of employability on relationships between job insecurity and work and non-work outcomes for individual employees. Data from 28,674 participants in 35 nations were obtained from the 2015 European Working Conditions Survey. Results showed that nation-level differences in individualism/collectivism (I/C), uncertainty avoidance (UA), and masculinity/femininity (M/F) accounted for variation in the degree to which perceptions of employability buffered the negative effects of job insecurity on job satisfaction, work engagement, and subjective well-being. Among more collectivist cultures, employability did less to minimize the effects of job insecurity on job satisfaction, than in more individualistic cultures. Employability also had a weaker effect on buffering the consequences of job insecurity for job satisfaction and work engagement when cultural uncertainty avoidance was higher. And across all three outcome measures, higher levels

of job insecurity combined with lower perceptions of employability were consistently more detrimental to individuals in more masculine cultures. Results support prevailing theory about the mechanisms thought to account for the effects of job insecurity on individuals and suggest several important practical implications for managing a global workforce.

Keywords: job insecurity, employability, national culture

The data that support the findings of this study are openly available in UK Data Service at <http://doi.org/10.5255/UKDA-SN-8098-4>

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Employment has changed dramatically in the last decade. Organisational restructuring and downsizing, technological advancements, globalization of the workforce, and the rise of temporary employment have led to mass lay-offs (Silva, Menon, Falco, & MacDonald, 2019). Not surprisingly, job insecurity (JI) has become a prevalent and growing concern within the modern workforce (Jiang & Lavaysse, 2018) and has attracted considerable research attention (Cheng & Chan, 2008; Sverke, Hellgren, & Näswall, 2002). Researchers have found that JI is not an isolated phenomenon. Rather it sets off a chain reaction that can detrimentally influence an individual's health (Ferrie, Shipley, Newman, Stansfeld, & Marmot, 2005; Hellgren & Sverke, 2003), job satisfaction (Ashford, Lee, & Bobko, 1989; Cheng & Chan, 2008; Sverke et al., 2002), organizational commitment (De Witte & Näswall, 2016; Sverke et al., 2002), and work performance (Sverke, Låstad, Hellgren, Richter, & Näswall, 2019), in addition to having adverse spillover effects outside of work (Richter, Näswall, Lindfors, & Sverke, 2015; Wilson, Larson, & Stone, 1993).

However, meta-analyses have shown substantial variation in the effects of JI, revealing that not everyone is affected by JI the same (Cheng & Chan, 2008; Sverke et al., 2002). Thus, as research on the consequences of JI has advanced, attention has turned to the role of moderators that alter the strength of the associations between perceptions of JI and its outcomes, intensifying or buffering the negative consequences of JI for employees. Most of the previous research has addressed individual-level moderators, such as perceived control (Vander Elst, Van den Broeck, De Cuyper, & De Witte, 2014), personality (Iliescu et al., 2017), age (Yeves, Bargsted, Cortes, Merino, & Cavada, 2019), and gender (Emanuel, Molino, Presti, Spagnoli, & Ghislieri, 2018).

Of the individual-level moderators, perceived employability (EM) has recently come to the foreground of JI research, demonstrating consistent buffering effects on relationships between JI and a range of negative outcomes (De Cuyper, De Witte, Kinnunen, & Nätti, 2010; De Cuyper, Picolli, Fontinha, & De Witte, 2019; Yeves et al., 2019). A number of authors have pointed out that in today's dynamic labor market, EM can become an alternate form of job security for many workers (Fugate, Kinicki, & Ashforth, 2004; Kovalenko & Mortelmans, 2016). Indeed, EM has become a part of international policies that aim to counteract the consequences of JI for employees while also maintaining flexibility advantages for organizations (European Commission, 1997).

At the same time, driven by the recognition that JI reflects employment processes susceptible to globalization, researchers have begun to investigate the role of cultural differences in reactions to perceived JI. In an international study of JI in 17 European countries, Erlinghagen (2008) reported that, even after controlling for a variety of social and institutional variables, differences in perceptions of JI in distinct countries point to “the existence of unobserved factors, which influence the subjective interpretation of one's employment situation” (p.193). Although large-scale multinational empirical investigations are rare, recent empirical evidence suggests that several cultural dimensions, such as individualism/collectivism (I/C) (Probst & Lawler, 2006; Roll, Siu, Li, & De Witte, 2015), masculinity/femininity (M/F) (Debus, Kleinmann, König, & Winkler, 2020), and uncertainty avoidance (UA) (Debus, Probst, König, & Kleinmann, 2012; König, Probst, Staffen, & Graso, 2011; Sender, Arnold, & Staffelbach 2017), may play a role in moderating relationships involving JI.

Yet, despite these breakthroughs, a great deal still needs to be learned “to draw a clear picture about culture’s precise impact” on JI (Lee, Huang, & Ashford., 2018, p. 349). Indeed, given the complex and multivariate nature of cross-national approaches to JI, and their potential to clarify relationships between JI and its outcomes, there has been a demand for more systematic research that investigates manifestations of JI in different cultures (Greenhalgh & Rosenblatt, 2010; Roll et al., 2015), including how contingent relationships between JI and various outcomes further depend on an individual’s national context (Schaufeli, 2016). Thus, the purpose of the present study is to bring together research on the role of perceived EM as an individual-level moderator of relationships involving JI, and recent international evidence of cultural differences involving JI, to investigate how the buffering effects of EM vary across nations that differ in several key cultural dimensions. We evaluate the effects of perceived JI, EM, and national culture on two work-related employee outcomes, namely job satisfaction (JS) and work engagement (WE), and one non-work outcome, subjective well-being (SWB). As such, our research contributes to an emerging understanding of the contingent consequences of JI for individual workers, and how the effects of JI vary across important individual-level and cultural-level factors.

Job Insecurity, Its Mechanisms, and Outcomes

Job insecurity refers to a “perceived threat to the continuity and stability of employment as it is currently experienced” (Shoss, 2017, p.1914), and as such, represents a subjective assessment regarding one’s current job. It is characterized by feelings of uncertainty and unpredictability (De Witte, 1999), powerlessness and lack of control (Dekker & Schaufeli, 1995; Greenhalgh & Rosenblatt, 1984), and fear over a potential loss of recognition and status (Debus et al., 2020). JI is a “formidable stressor” (Shoss, 2017, p.1926), which often violates the implicit

employer-employee psychological contract (Rousseau, 1995), and undermines feelings of agency and control (Greenhalgh & Rosenblatt, 1984).

Not surprisingly, higher levels of JI have been implicated in multiple detrimental outcomes, including poorer health, negative organizational and job attitudes, and deteriorated work behavior (Bernhard-Oettel, De Cuyper, Schreurs, & De Witte, 2011; Ferrie et al., 2005; Probst, 2000; Sverke et al., 2019). Job satisfaction (JS), which reflects an evaluation of one's job (Weiss, 2002), is one of the most studied of all the outcomes related to JI (Sverke, Hellgren, & Näswall, 2006; Reisel, Probst, Chia, Maloles, & König, 2010), with meta-analyses confirming strong negative correlations between JI and employee satisfaction ratings (Cheng & Chan, 2008; Sverke et al., 2002). Job satisfaction is a central construct in the organizational sciences, believed to underlie a range of important individual and organizational outcomes, including organizational commitment and work-related behavior (Yoon & Thye, 2002), physical health and psychological well-being (Spector, 1997), and job performance (Ng, Sorensen, Yim, 2009).

Work engagement (WE), a construct bearing a close relationship with JS (Lu, Lu, Gursay, & Neale, 2016; Karanika-Murray, Duncan, Pontes, & Griffiths, 2015), has also been linked to JI. For instance, Mauno, Kinnunen, and Ruokolainen (2007) reported negative correlations between JI and each of the three main dimensions of work engagement, namely absorption, vigor, and dedication, in a sample of Finnish employees. Similarly, Vander Elst, Bosman, De Cuyper, Stouten, and De Witte (2013) observed a strong negative correlation between JI and an overall measure of WE in a sample of South African workers. The present research utilizes measures of job satisfaction and work engagement to examine the interactive effects of JI, perceived EM, and culture on employee work-related outcomes.

Outside of the work domain, evidence shows significant negative consequences of JI for individuals' overall subjective well-being (SWB), defined as their cognitive and affective assessment of essential areas of life, and prevalence of positive affect over negative affect (Diener, 1984, 2012). Darvishmotevali and Ali (2020) reported a significant negative correlation between JI and ratings of SWB in a sample of hotel employees in Iran. Similarly, Hu, Jiang, Probst, and Liu (2018) found a negative correlation between JI and SWB in a sample of 500 Chinese employees. Additionally, several studies uncovered correlations between JI and physical and mental well-being (Barling & Kelloway, 1996; Hellgren & Sverke, 2003), with one longitudinal study supporting a causal relationship between JI and reduced well-being (De Witte, Pienaar, & De Cuyper, 2016). The present research utilizes a measure of SWB to examine non-work outcomes related to perceived JI, EM, and national culture.

Although individual studies differ in their emphasis, the literature is consistent in viewing stress (Shoss, 2017; Sverke et al., 2002), violations of the psychological contract (Ma, Liu, Lassleben, & Ma, 2019; Millward & Brewerton, 1999), and a loss of status or success (Debus et al., 2020) as the fundamental mechanisms by which JI relates to adverse individual outcomes. Indeed, in a large body of research, JI is assumed to be a powerful stressor (e.g., Cheng & Chan, 2008; De Witte et al., 2016; Yeves et al., 2019), eliciting feelings of uncontrollability or powerlessness (De Cuyper, Bernhard-Oettel, Berntson, De Witte, & Alarco, 2008; Dekker & Schaufeli, 1995; Greenhalgh & Rosenblatt, 1984). At the same time, employees differ in their reactions to a job stressor, like JI, depending on personal, situational, and social contextual factors (Lazarus & Folkman, 1984). Thus, not surprisingly, researchers have observed that

negative reactions to JI are buffered by perceptions of control (Barling & Kelloway, 1996; Vander Elst, De Cuyper, Baillien, Niesen, & De Witte, 2016).

Job insecurity is also thought to elicit adverse reactions through its mediating effects on social exchange processes at work. In particular, perceptions of JI reflect a breach of the relational psychological contract between employee and employer (Callea, Urbini, Ingusci, & Chirumbolo, 2016; King, 2000; López Bohle, Bal, Jansen, Leiva, & Alonso, 2017), whereby employees come to expect security and other socio-emotional benefits in exchange for effort and loyalty at work (Schoss, 2017). One of the most direct ways that employees react to psychological contract breach is with job withdrawal, manifesting in reduced engagement and decreased overall satisfaction with work (Spector, 1997; De Cuyper & De Witte, 2006).

Finally, Debus et al. (2020) argued that JI triggers feelings of failure and loss of identity in an important life domain, and as such, results in stronger negative consequences for those who identify more with work (Cheng & Chan, 2008; Schoss, 2017). Jobs are important to people, and provide a sense of identity and self-determination, which is threatened when employees perceive lower job security (Jahoda, 1982). All three of these psychological mechanisms – stress, psychological contract violations, loss of status or identity – are likely to depend on a host of individual and cultural level moderators. At the individual level, perceived EM has emerged as a consistent and robust buffer of the negative effects of JI for individuals.

Employability and Job Insecurity

Whereas JI represents perceptions of the security of one's current job, perceived employability (EM) reflects an individual's assessment of the availability of future job opportunities (De Cuyper, Notelaers, & De Witte, 2009). Individuals with higher levels of

perceived EM have better opportunities than those with lower EM, and combined with JI, the two constructs represent one's outlook on overall employment security (De Cuyper et al., 2019). Naturally, employability reduces the stress of JI by providing employees with a greater sense of control (Berntson & Marklund, 2007), and empirical evidence has accumulated on the buffering effects of EM on relationships between JI and several job attitudes, including job satisfaction, commitment, and turnover intentions (e.g., Berntson, Näswall, & Sverke, 2010; De Cuyper et al., 2019; Sora, Caballer, & Peiró, 2010; Yeves et al., 2019).

Although empirical evidence consistently supports the buffering effects of EM for work-related attitudes, research on the role of EM in moderating relationships between JI and non-work outcomes remains more equivocal, even though EM itself is positively correlated with well-being (Bernston & Marklund, 2007; De Cuyper et al., 2008; Vanhercke et al., 2016). For instance, Kirves, De Cuyper, Kinnunen, and Nätti (2011) failed to observe a significant buffering effect of EM on the relationship between JI and mental well-being in a sample of Finish employees. However, at least two studies found that EM moderated the relationship between JI and life satisfaction (Green, 2011; Silla, De Cuyper, Gracia, Peiró, & De Witte, 2009). Therefore, to clarify this issue, additional research is needed that investigates the buffering effects of EM on relationships between JI and a range of outcomes, including work and non-work variables. In line with both theory and empirical evidence, we hypothesize that the effects of JI on employee JS, WE, and SWB will be stronger among individuals who perceive lower levels of EM.

Hypothesis 1: JI will interact with EM to influence (a) job satisfaction, (b) work engagement, and (c) subjective well-being, such that the effects of JI will be stronger when perceived EM is lower.

Despite theoretical and empirical consistency, previous research of the buffering effects of EM has been limited to single country samples (Belgian for Silla et al., 2009 and De Cuyper, Baillien, & De Witte, 2009; Chilean for Yeves et al., 2019; Spanish for Sora et al., 2013; Finnish for Kirves et al., 2011), creating some questions about generalizability across national and cultural boundaries. At the same time, interest in cross-cultural moderation of the effects of JI has grown (Lee et al., 2017), with several studies documenting important contingent effects of JI perceptions in different cultural contexts (e.g., Debus et al., 2012, 2020; Probst & Lawler, 2006). The present study is unique in using a multinational dataset to investigate theory-driven predictions about the combined effects of culture and EM perceptions on relationships involving JI.

Job Insecurity and Culture

Job insecurity is a global phenomenon: according to the most recent data from Ipsos (2020), 54% of employed adults in 27 countries are concerned about losing their jobs. Unsurprisingly, emerging research has sought to investigate the role of culture as a moderator of the effects of JI on individual outcomes (e.g., König et al., 2011; Roll et al., 2015; Sender et al., 2017). At the core of culture, values are thought to serve as the organizing framework for defining what is desired and desirable (Hofstede, 2001, p.5), resulting in nation-level differences in normative perceptions and interpretations, and reactions to experiences like JI. Thus, prior research on the effects of JI has tested predictions derived from several of the common

theoretical models of cultural value dimensions, including the GLOBE (House, Hanges, Javidan, Dorfman, & Gupta, 2004) model (Debus et al., 2012; König et al., 2011; Sender et al., 2017), and Hofstede's (1980, 2001) framework (Debus et al., 2020; Probst & Lawler, 2006). Of the cultural value models, Hofstede's is the most well-known and researched, and forms the basis for hypotheses tested in the present research. In particular, the present research investigates the moderating role of cross-national differences in individualism/collectivism (I/C), uncertainty avoidance (UA), and masculinity/femininity (M/F) on the interaction between JI and EM.

Individualism/Collectivism (I/C)

I/C has attracted considerable attention, becoming one of the most studied dimensions of national culture (Oyserman, Coon, & Kemmelmeier, 2002; Taras, Kirkman, & Steel, 2010). Members of nations higher in individualism focus more on personal values and goals, while collectivistic societies prioritize in-group relationships and shared values and goals (Oyserman et al., 2002). Because differences in I/C translate into variations in self-identity and group commitment (Hui, 1988; Kirkman, Lowe, & Gibson, 2006), it is not surprising that I/C has been implicated in a variety of work outcomes, values, behaviors, and attitudes (Hartung, Fouad, Leong, & Hardin, 2010; Probst & Lawler, 2006; Roll et al., 2015). According to Hofstede (1980), collectivists are more apt to value job security and good working conditions, whereas individualists place more emphasis on task variety and autonomy (Probst & Lawler, 2006). Thus, as Probst and Lawler (2006) argued, JI is especially threatening to members of more collectivist cultures, given that it undermines perceptions of group identity and security.

Job insecurity also often violates the employer-employee psychological contract (e.g., Schoss, 2017), which is more important to members of collectivist cultures. As Thomas, Au, and Ravlin (2003) argued, collectivists are more sensitive than individualists to the relational aspects

of their psychological contract with their employers, whereas individualists tend to be more driven by the transactional aspects (Ravlin, Liao, Morrell, Au, & Thomas, 2012). Qualitative evidence reported by Du and Vantilborgh (2020) suggested that the employer-employee psychological contract of Chinese workers emphasized security more than it did among Belgian workers. Consistent with these predictions, Probst and Lawler (2006) observed stronger relationships between JI and JS among individuals who reported higher collectivism, and in a two-country comparison, JI was more strongly related to satisfaction among Chinese participants (more collectivist), than U.S. participants, who are more individualistic.

We extend this line of research by testing whether nation-level differences in I/C account for variation in the moderating effects of EM on relationships between JI and employee outcomes. As noted, EM is powerful individual-level moderator of the effects of JI, providing employees with a sense of control (Bernston, Näswall, & Sverke, 2010), and thereby reducing the negative consequences of JI. However, the capacity for EM to buffer the negative effects of JI also likely depends on other factors. In particular, we reason that the moderating effects of EM will be enhanced in more individualistic cultures compared to collectivist cultures. JI implies a loss of organizational relationships, in-group memberships, and collective organizational identity, and presents a threat to one's social identity (Selenko, Mäkikangas, & Stride, 2017). Although EM increases one's chances of finding new employment after losing a job, it cannot replace the lost interpersonal relationships and shared identity that collectivists value. Employability also cannot compensate for negative reactions stemming from perceived violations of the employer-employee psychological contract, which is more valued in cultures higher in collectivism (lower individualism). Thus, EM should more strongly moderate the

effects of JI in more individualistic cultures, implying a 3-way interaction between JI, EM, and I/C in influencing employee JS, WE, and SWB:

H2: There will be a 3-way interaction between JI, EM, and I/C, such that EM will have a stronger moderating effect on the relationships between JI and (a) job satisfaction, (b) work engagement, and (c) subjective well-being in more individualistic countries compared to more collectivistic countries.

Uncertainty Avoidance

Uncertainty avoidance (UA), a second cultural dimension identified in Hofstede's (1980) research, has attracted considerable recent attention in research on the effects of JI. According to Hofstede (1980), UA reflects variation in the degree to which cultures value certainty, predictability, and controllability. Thus, König et al. (2011) predicted that workers in higher UA are likely to have stronger reactions to potential job loss than employees in lower UA cultures, due to the conflict between the threat and uncertainty associated with potential job loss and shared cultural values that emphasize avoiding risk and uncertainty. Empirical findings, however, showed the opposite. Studies by König et al. (2011), Debus et al. (2012), and Sender et al. (2017) all found that workers in countries with lower scores on the GLOBE UA practices dimension reacted more strongly to JI. However, the GLOBE UA practices scores used in these studies reflect a different construct than UA values, and evidence suggests that UA practices and values correlate negatively (House et al., 2004). Countries with higher levels of UA practices invest more in social structures and mechanisms to reduce uncertainty, and focus more on laws and regulations, than nations with lower scores on the GLOBE UA practices (House et al., 2004). Thus, it was reasoned that higher levels of UA practices buffer the consequences of JI

because these cultures invest in services and programs designed to minimize the disruption caused by job loss (Debus et al., 2012; König et al., 2011; Sender et al., 2017).

Left unexplored, however, is how UA values, as defined in Hofstede's cultural value framework (1980; 2001), moderate reactions to JI. JI reflects a state of prolonged uncertainty about the future (Sverke et al., 2002), which is precisely the type of situation that is likely to be especially stressful in cultural contexts that value certainty and predictability. More importantly, we reason that UA combines with perceived EM to have interactive buffering effects on relationships between JI and individual outcomes. Specifically, we predict that the moderating effects of EM are likely to be weaker in higher UA cultures, compared to lower UA cultures. Lazarus and Folkman's (1984) theory distinguished between two coping responses to stress: emotion-focused coping and problem-focused coping. Employability reflects a problem-focused strategy, but may not help to address emotional reactions to JI. Moreover, while greater EM increases one's odds of finding a replacement job, it doesn't address the uncertainty associated with learning new job tasks and requirements, establishing new working relationships, and navigating a new set of organizational norms and policies. These uncertainties are likely to have stronger effects in cultures that are higher in UA values. Thus, we predict that the buffering effects of EM on relationships involving JI will be weaker in cultures that are higher in UA.

Hypothesis 3: There will be a 3-way interaction between JI, EM, and UA, such that the moderating effects of EM on relationships between JI and (a) job satisfaction, (b) work engagement, and (c) subjective well-being will be stronger in lower UA nations compared to nations that are higher in UA.

Masculinity/Femininity

Hofstede's (1980) masculinity/femininity (M/F) dimension has also attracted considerable attention in recent international JI research. Masculine cultures emphasize "assertiveness, the acquisition of money and things" (Hofstede, 1980, p.46), whereas more feminine cultures tend to place greater value on cooperation, solidarity, and maintaining friendly relationships. Thus, Debus et al. (2020) argued that JI is especially troubling in more masculine cultures, due to its implications for potential loss of status and income. Their findings were largely supportive; cross-cultural and individual-level comparisons revealed that the relationship between JI and JS was stronger as masculinity increased. When combined with EM, we predict differential effects of JI depending on nation-level differences in M/F. In particular, EM is likely to be a strong buffer of the effects of JI when masculinity is high, because high EM implies agency and self-determination, which should be of importance to members of high masculinity cultures. Moreover, higher levels of JI combined with low EM should be of greater consequence in higher masculinity cultures, because the perceived threat of job loss, combined with low EM perceptions is especially in conflict with cultural values emphasizing the importance of work, assertiveness, success, and income (Hofstede, 2001). Thus, we predict that the effects of JI will be amplified when perceptions of EM are lower among members of cultures that are higher in masculinity, implying a stronger moderating effect of EM on relationships involving JI and individual-level outcomes.

Hypothesis 4: There will be a 3-way interaction between JI, EM, and M/F, such that the moderating effects of EM on relationships between JI and (a) job satisfaction, (b)

subjective well-being, (c) work engagement will be stronger in cultures that are higher in masculinity.

Method

Participants

Individual response data were obtained from the 2015 European Working Condition Survey (EWCS), which is part of an ongoing survey of residents of European nations on a range of topics (Eurofound, 2017). The 2015 EWCS collected data from individual members of 35 European countries with 43,850 participants (27 European Union members, and the UK, Albania, Macedonia, Montenegro, Serbia, Turkey, Switzerland, and Norway). Our analyses rely on responses from 28,674 participants with complete data, who reported being employed for pay. We also excluded data from Albania, Cyprus, Montenegro, North Macedonia (FYROM) from tests of Hypotheses 2-4, because of missing values for the culture variables described below, resulting in a sample of 26,330 participants in 31 nations for those tests. Table 1 shows the sample sizes and means and standard deviations of the study variables in each nation in the present research. Participants averaged 41.78 years of age ($SD = 11.90$), and 49.11 % of the sample was male.

Measures

Job Insecurity

Job insecurity (JI) was measured in the EWCS with the item, “I might lose my job in the next 6 months”, which participants rated on a 5-point scale, anchored “strongly disagree” to “strongly agree.” This item has been used as a measure of JI in research reported by several authors (e.g., Burchell, 2009; Caroli & Godard, 2016; Emre & De Spiegeleare, 2019; Hakanen, Ropponen, De Witte, & Schaufeli, 2019; Kiersztyn, 2017; Schutte et al., 2014).

Employability

The EWCS measured perceived employability (EM) with the item, “If I were to lose or quit my current job, it would be easy for me to find a job of similar salary”, which participants rated with a 5-point scale, anchored “strongly disagree” to “strongly agree.” This item has been used in several recent studies (e.g., Schutte et al., 2014; Shelest-Szumilas, 2020).

Single-item measures are commonly used in research on JI (e.g., Arnold & Feldman, 1982; Borg & Elizur, 1992; Davy, Kinicki, & Scheck, 1991; De Cuyper, et al., 2010; Mohr, 2000), although their reliability may be difficult to determine. Thus, we recruited a separate sample of 110 working adults in the U.S. from Prolific.co, who responded to the JI and EM items used in this research along with published measures of the same constructs. Specifically, we administered the 4-item JI measure developed by De Witte (2000), and the 4-item measure of EM developed by De Witte (1992), which had internal consistency reliabilities of 0.892 and 0.943, respectively, in the validation sample. The correlation between the single-item measure of JI used in the present research and the 4-item De Witte (2000) measure was strong ($r = 0.832$, $t = 15.565$, $df = 108$, $p < 0.001$), as expected, although the correlation between the single EM and the 4-item EM scale was lower ($r = 0.622$, $t = 8.250$, $df = 108$, $p < 0.001$). The somewhat lower correlation for the EM item is likely due to differences in item content: the EWCS item asked participants about finding another job of similar salary, whereas items in the De Witte (1992) measure merely focus on finding another job, without reference to the equivalence of job conditions. The results are, therefore, not surprising, because respondents could certainly imagine alternative employment options that don’t pay salaries equivalent to their current jobs. After correcting the observed correlations for unreliability in the full-length measures, the correlations between the single JI and EM items and their full-length counterparts were 0.88 and 0.65, respectively.

Job Satisfaction

Job satisfaction (JS) was measured in the present study with 6 items in the EWCS: “Considering all my efforts and achievements in my job, I feel I get paid appropriately”, “My job offers good prospects for career advancement”, “I receive the recognition I deserve for my work”, “I generally get on well with my work colleagues”, “The organization I work for motivates me to give my best job performance.” Participants used a 5-point scale anchored, “strong disagree” to “strongly agree” for each item except, “on the whole, are you very satisfied, satisfied, not very satisfied or not at all satisfied with working conditions in your main paid job?” which was rated with a 4-point scale anchored, “not at all satisfied” to “very satisfied.” Because items were answered on different response scales, we standardized items in the combined samples prior to forming an overall composite (Cronbach’s $\alpha = 0.797$).

Work Engagement

Work engagement (WE) was measured in the EWCS with 3 items from the Utrecht Work Engagement Scale (UWES) developed by Schaufeli, Bakker, and Salanova (2006). Each item in the present measure reflects a different dimension of the WE construct defined by Schaufeli and colleagues (Schaufeli, Salanova, González-Romá, & Bakker, 2002): “At work, I feel full of energy” (vigor), “I am enthusiastic about my job” (dedication), and “time flies when I am working” (absorption). Participants used a 5-point scale anchored, “never” to “rarely.” Internal consistency (Cronbach’s α) in the combined samples was 0.726.

Subjective Well-Being

Subjective well-being (SWB) was measured with the 5-item WHO-5 Well-Being Index (Bech, Gudex, & Staehr Johansen, 1996; Staehr Johansen, 1998; Topp, Ostergaard, Sondergaard, & Bech, 2015), which measures subjective quality of life based on a variety of

factors. Items included, “I have felt cheerful and in good spirits”, “I have felt calm and relaxed”, “I have felt active and vigorous”, “I woke up feeling fresh and rested”, and “My daily life has been filled with things that interest me.” Participants used a 6-point response scale anchored, “at no time” to “all of the time”. Internal consistency (Alpha) in the present study was 0.880 in the combined samples.

Measurement Equivalence Analysis

Items in the EWCS were translated into the national languages of the respondents (Eurofound, 2017). Thus, unique in JI research, we evaluated the psychometric equivalence of the outcome measures in this research using multiple groups confirmatory factor analysis (MGCFA; Vandenberg & Lance, 2000). We began by testing an initial baseline multiple-groups configural model, which hypothesized 3 correlated latent factors for JS, WE, and SWB, with freely estimated item loadings, except for a single item used to set the scale of each latent factor (Vandenberg & Lance, 2000). This model fit the data well, as indicated by the CFI and RMSEA values ($\chi^2 = 11643.450$, $df = 2590$, $CFI = 0.948$, $RMSEA = 0.065$). We then tested the stricter metric invariance model (Vandenberg & Lance, 2000), which hypothesizes that items have equivalent loadings across all groups. This model also fit the data well ($\chi^2 = 13976.968$, $df = 2964$, $CFI = 0.936$, $RMSEA = 0.067$). Although the change in CFI compared to the configural model was 0.012, which barely exceeds the recommended cutoff of 0.010 for concluding there is non-equivalence among some item loadings (e.g., Chen; 2007; Cheung & Rensvold, 2002), the change in RMSEA was well within the recommended cutoff of 0.015. Furthermore, as Rutkowski and Svetina (2014) argued, these well-known cutoffs assume only two groups are compared; when a large number of groups is being compared simultaneously, Rutkowski and Svetina (2014) recommend a more liberal cutoff of 0.020 for the change in CFI, which is much

greater than the value observed in the present study. Thus, taken together, MGCFA support the use of observed scores in comparing responses across nations.

Cultural Values

We used the nation scores for I/C, UA, and M/F provided by Hofstede (2010). Scores were not available for 5 nations in the present research, as noted above.

Control Variables

Consistent with prior research (Debus et al, 2012; Yeves et al., 2019), we controlled for age, education, gender, and the number of subordinates supervised by the participant (supervisory position) in all individual-level and multi-level tests.

Results

Table 1 shows means and standard deviations of the primary study variables in each nation. Overall means, standard deviations, and correlations for the combined nation-level samples are reported in Table 2. As expected, JI was negatively correlated with JS ($r = -0.244$, $t = -42.564$, $df = 28672$, $p < 0.001$), WE ($r = -0.186$, $t = -32.025$, $df = 28672$, $p < 0.001$), and SWB ($r = -0.125$, $t = -21.265$, $df = 28672$, $p < 0.001$). EM was positively correlated with JS ($r = 0.113$, $t = 19.214$, $df = 28672$, $p < 0.001$), WE ($r = 0.075$, $t = 12.738$, $df = 28672$, $p < 0.001$), and SWB ($r = 0.082$, $t = 13.934$, $df = 28672$, $p < 0.001$). Overall, these correlations are consistent with results reported in previous meta-analytic research (e.g., Cheng & Chan, 2008; Jiang & Lavaysse, 2018).

Tests of Hypotheses

Because the data are inherently multilevel (i.e., level 1 = individuals, level 2 = nations), we tested study hypotheses using hierarchical linear modeling (HLM), using the *lmerTest* package (Kuznetsova, Brockhoff, & Christensen, 2017) in R, with the *bobyqa* optimizer.¹ JI and

EM were entered as fixed and random effect terms, and all control variables (and the culture values in the models for three-way interactions) were entered as the fixed effect terms only. Scores on individual-level measures (i.e., JI, EM, JS, SWB, WE) were standardized in the total sample prior to analysis, and culture values were centered using the overall mean.

We first tested the two-way interactions of $JI \times EM$ for each outcome measure. Consistent with Hypothesis 1, significant two-way interactions were observed in predicting JS ($\beta = 0.020, p < 0.001$) and SWB ($\beta = 0.017, p = 0.002$). Significant interactions were plotted using values ± 1 standard deviation of the mean in the relevant regression equations. Figures 1 and 2 show that, as hypothesized, JI related more strongly to JS and SWB when EM was lower, compared to when EM was higher. This is consistent with the view that EM buffers the negative effects of JI on individual level outcomes. The interaction between JI and EM was not significant for WE ($p = 0.139$).

Hypotheses 2-4 were tested by adding the three-way interactions between JI, EM, and each of the cultural values in separate HLM models. The results of HLM tests for each of the outcome measures are shown in Tables 3-5, respectively. Consistent with Hypothesis 2a, a significant 3-way interaction between JI, EM, and I/C was observed in predicting JS ($\beta = 0.0007, p = 0.002$). As can be seen in Figure 3, higher levels of EM had a stronger buffering effect on the relationship between JI and JS in cultures that are higher in I/C (more individualistic), whereas EM had a weaker buffering effect in more collectivistic cultures. Table 6 shows slopes estimated for the relationship between JI and each individual-level outcome, at low and high levels of EM and I/C, using the *interactions* package in R (Long, 2019). As can be seen, the slope relating JI with JS varied more across levels of low and high EM in cultures that were higher in I/C (more individualistic). I/C did not interact significantly with JI and EM when

predicting WE (Table 4) or SWB (Table 5), however, failing to support Hypothesis 2b and 2c. The pattern of results for WE and SWB was similar to that of JS, but just failed to reach statistical significance ($p = 0.062$ for both WE and SWB).

Hypothesis 3 predicted 3-way interactions between JI, EM, and UA. As can be seen in Tables 3 and 4, the interaction was significant for JS ($\beta = -0.0005$, $p = 0.012$) and WE ($\beta = -0.0005$, $p = 0.042$). Figure 4 shows a pattern of results for JS that is consistent with the hypothesis; EM has a weaker buffering effect on the relationship between JI and JS in cultures that are higher in UA. Similarly, Figure 5 shows that the relationship between JI and WE were stronger with higher levels of EM in cultures that are higher in UA, compared to lower UA cultures. A similar pattern was observed for SWB, although the 3-way interaction just failed to reach significance ($p = 0.059$). As can be seen in Table 6, the slopes relating JI to JS and WE were affected more by variation in levels of EM among cultures that are lower in UA.

Finally, as can be seen in Tables 3-5, M/F interacted with JI and EM in predicting all three of the individual-level outcomes investigated in this research (for JS, $\beta = 0.0009$, $p < 0.001$; for WE, $\beta = 0.0009$, $p < 0.001$; for SWB, $\beta = 0.0008$, $p = 0.002$). Figure 6 shows that, consistent with Hypothesis 4a, JI was more strongly related to JS for individuals who perceived lower EM and were from more masculine cultures. Figures 7 and 8 show a similar pattern, supporting Hypothesis 4b and 4c. JI is consistently associated with stronger effects on individuals from more masculine cultures who perceive lower levels of EM, as predicted by Hypothesis 4. As can be seen in Table 6, the slopes relating JI to each outcome were more strongly affected by variation in levels of EM among cultures that are higher in M/F (i.e., more masculine).

Discussion

The present research sought to contribute to a developing understanding of the various contingencies, or moderating factors, that either exacerbate or buffer the effects of job insecurity (JI) for individual workers. Among individuals, perceptions of employability (EM) play a prominent role in buffering the negative consequences of JI (Berntson et al., 2010; Green, 2011; Yeves et al., 2019). At the collective level, emerging studies of the influences of national culture demonstrate the importance of considering JI in a global context (e.g., Debus et al., 2012, 2020; Probst & Lawler, 2006; Sender et al., 2017). The present research is unique in bringing together these disparate streams of inquiry to test three-way interactions, whereby the contingent buffering effects of EM on reactions to JI vary with cultural differences across national borders.

Based on emerging research (e.g., De Cuyper et al., 2019; Green, 2011; Ngo, Liu, & Cheung, 2017; Silla et al., 2009; Yeves et al., 2019), we began by predicting that results in the present international samples would replicate previous findings which have demonstrated that the effects of JI are weaker when perceived EM is higher. As hypothesized, results showed that EM reduced the influence of JI on JS and SWB in the present samples, in line with findings reported by other authors. In dealing with JI, a situation that is otherwise perceived as unpredictable, EM gives workers a sense of control, which minimizes stress, and subsequently, reduces the negative consequences of JI on work and non-work outcomes (Fugate et al., 2004).

Still, EM did not significantly moderate the effects of JI on WE in the present research. The reasons are not entirely clear. Schoss (2017) noted that employees often respond to higher perceived JI with increased effort and engagement at work, attempting to show their value in hopes of retaining employment. Ngo et al. (2017), however, observed a moderating effect of EM on WE in a sample of employees in Hong Kong. Our results suggest the need for further

investigations of WE and employee performance outcomes in research on the effects of JI. Like Silla et al. (2009), our results show that “employability-like indicators moderate the relationship between job insecurity and some outcomes, but not others (p. 747).” The present research is unique, however, in investigating how variations in the moderating effects of EM depend on cultural value orientations.

Based on the notion that JI threatens a loss of valued relationships (Jahoda, 1982), and entails potential violations of the employer-employee psychological contract (Callea et al., 2016; King, 2000; Kirves et al., 2011; López Bohle et al., 2017), we hypothesized that EM would be less apt to buffer the effects of JI in cultures that are higher in collectivism. As predicted, results of our HLM analyses supported the hypothesized three-way interaction when predicting JS, but not when predicting WE or SWB, although the results were similar to those for JS. Thus, like the two-way interactions between JI and EM, the three-way interaction involving I/C depended on the outcome measure being tested. At least with respect to JS, our results support the idea because collectivists tend to be more apt than individualists to value in-group relationships (Oyserman et al., 2002), identify more with their work colleagues (Gundlach, Zivnuska, & Stoner, 2006; Love, 2007) and have a stronger reaction to a breach of the relational psychological contract at work (cf. Thomas et al., 2016), EM is less effective as a mechanism for coping with JI. Although EM can improve one’s likelihood of finding alternative employment, it cannot directly resolve concerns about losing valued working relationships, or about developing a new organizational identity, and it also cannot resolve violations of the perceived psychological contract with one’s current employer, all of which matter more to members of more collectivist cultures.

Although the three-way interaction involving JI, EM, and I/C was in the predicted direction for WE and SWB, it was not significant ($p = 0.062$ for WE and SWB). As previously noted, SWB is a distal outcome, and may not be as strongly affected by JI as more job-specific reactions (Kirves et al., 2011). Certainly, the present research suggests the need for further investigation with a wider range of job and non-job outcomes in large multinational samples. Our findings build on previous studies of the role of I/C as a moderator of the effects of JI, which have largely been limited to comparisons within nations (Hartung et al., 2010; Probst & Lawler, 2006) or between a small number of countries (Roll et al., 2015).

Uncertainty avoidance is another important dimension in Hofstede's (1980) cultural values model, which reflects differences in how people respond to ambiguity, threat, and risk (Hofstede, 2001). We reasoned that because JI represents a perceived threat and an unknown future, EM would be less apt to buffer the effects of JI for members of high UA cultures. Although EM helps individuals to resolve worries about future income, higher levels of JI still imply considerable uncertainty with respect to new working conditions, relationships, and organizational norms. Thus, as we predicted, in higher UA cultures, EM had a weaker buffering effect on the relationship between JI and JS than in lower UA cultures. The interaction was also significant for WE, although the effect was weaker. And, as with results of tests of the two-way interactions and the interaction involving I/C, the 3-way interaction between JI, EM, and UA was not significant when SWB was the outcome. Thus, overall, our results contribute to previous findings that have reported cross-cultural differences in reactions to JI resulting from differences in UA. The present results are unique in investigating differences due to Hofstede's UA values, whereas the GLOBE UA practices dimension has been the focus of previous studies (Debus et al., 2012; König et al., 2011; Sender et al., 2017).

The strongest and most consistent three-way interactions in the present research involved the moderating effects of cultural differences in masculinity/femininity. Debus et al. (2020) argued that JI is especially threatening to members of masculine cultures because it implies a loss of status and income, which are more valued than in feminine cultures. It also implies a loss of agency or self-determination (Vander Elst, Van den Broeck, De Witte, & De Cuyper, 2012), to which masculine societies attach more significance (Hofstede, 1998). Thus, as we predicted, the combined effects of higher JI and lower EM are especially pronounced in high masculinity cultures. JI is a negative experience, but it's especially harmful for members of masculine cultures who perceive lower levels of EM. This was observed in both their work and non-work domains, as JS, WE, and overall well-being were all severely affected by JI when combined with low EM in masculine cultures. We would predict additional effects on workers' stress and health outcomes. Our results uncover culturally sensitive vulnerabilities that affect outcomes for individual employees, and build on previous research that has demonstrated robust effects of cultural differences in masculinity on reactions to JI (Debus, 2020).

Taken together, the findings of the present research contribute to theoretical understanding of the contingent effects of JI perceptions on individual workers. The consequences of JI depend on both individual and cultural factors, and as Cheng & Chan (2008) concluded, JI does not affect everyone the same. Moreover, EM, seen as an important employee resource (Forrier & Sels, 2003), varies in the degree to which it helps employees cope with a perceived threat to their jobs. Across cultures that vary in I/C, UA, and M/F, higher levels of perceived EM offer varying degrees of advantage. Following theoretical models of the role of JI in triggering perceptions of psychological contract violation (Rousseau, 1995), stress (Lazarus & Folkman, 1984), and loss of status or income (Debus, 2020), variation in the impact of EM

perceptions can be reliably predicted from cultural variables in Hofstede's (1980) cultural value model. Workers in more collectivist cultures may react more strongly to perceived JI than individualists, even when EM perceptions are high. This may be because they react more strongly to the psychological contract breach or the loss of relationships and identity. Uncertainty avoidance also triggers stronger reactions to JI among those who are employable, supporting the view that stress mediates the effects of JI (Ashford et al., 1989; Barling & Kelloway, 1996; Shoss, 2017), but depends on contextual factors (Lazarus & Folkman, 1984). Less employable workers in masculine cultures have especially negative reactions to JI, perhaps because it represents a fundamental threat to a key source of value in masculine cultures. "Individuals live to work" in masculine cultures, according to Hofstede (2001, p. 318), and our results illustrate some of the consequences of JI among those who are also less employable. In the large sample of nations investigated in the present research, JI and EM combined in unique ways that not only supported existing theoretical frameworks, but also suggest new insights into the contingent nature of JI perceptions and their consequences.

The present findings also imply practical consequences for managing a diverse workforce and responding to potential job loss. Employability policies should be adapted with consideration to a country's cultural values and practices. The present results suggest that "flexicurity" policies, which emphasize adaptable contractual arrangements, active learning, and modern social security programs (European Commission, 2007), might be somewhat less beneficial for employees in some cultures, such as cultures higher in UA and collectivism. In cultures that are more masculine, where employees suffer the most from JI in cases of low EM, job training and EM policies might be especially beneficial. As has been noted, not all workers have fully embraced EM as an alternative to job security, and many workers still depend on implicit

employment guarantees provided by their employers (De Cuyper, 2019). Our findings suggest that EM perceptions are of less utility among workers in more collectivist cultures, and cultures that are higher in UA, implying the need to consider cultural context when promoting the idea that EM can compensate for insecurity about current job loss. These findings are especially important as countries navigate through economic and employment crises resulting from the current global pandemic. According to the International Labour Organization data, 93 percent of the world's employees live in countries with at least some business closures, with an estimated 400 million jobs lost as of the second quarter of 2020 (ILO, 2020). Thus, it is logical to assume that with mass lay-offs, feelings of JI have also increased. As we move forward, both policymakers and organizations should take into account differences in JI perceptions that exist across cultures to better support employees in their local contexts.

As with all research, there are a few limitations worth noting. Because the present data are cross-sectional, causal relationships cannot be established. Longitudinal studies, however, have shown causal effects of JI on work and health outcomes (De Witte et al., 2016; Selenko, Mäkikangas, Mauno, & Kinnunen, 2013; Virtanen et al., 2013; Virtanen, Janlert, & Hammarström, 2011). Of particular interest might be future studies that examine how variation over time in cultural attitudes and values predict variation in the contingent effects of JI and EM perceptions. Additionally, although the results of the present study come from a large sample of respondents from many nations, the analyses are limited to the European context. Nevertheless, there is a significant variation in cultural dimensions within Europe, and we predict that the findings of the present study should be observable with samples from different regions of the world.

We were also limited to using single-item measures for some of the constructs investigated in this research, which precludes investigations of reliability. Our validation study supports the inference that our single-item scales measure their intended constructs adequately. Further, we found empirical support for the cross-cultural psychometric equivalence of the dependent measures used in this research, which is unique in JI research. Overall, the evidence supports the measures used in this research, and our results underscore the need to investigate additional outcomes of JI in future multinational research.

Despite limitations, this study adds to a growing body of research on cross-cultural manifestations of JI, and provides new insight into the role of culture as an important moderator of EM buffering effects in international contexts. Research is needed that extends the present findings, by investigating similar relationships within non-European nations, and with a broader sample of outcome measures. We hope the present research will encourage additional investigations into JI and its contingent consequences for individual workers.

Footnotes

¹ The results were also analyzed with the *nlme* package (with the *optim* optimizer) which is another commonly used multilevel analysis package in R. Both the *lmerTest* and the *nlme* packages yielded nearly identical results, with no differences implied in any of the conclusions based on the results.

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Tables

Table 1

Numbers of Participants and Means and Standard Deviations of Study Variables in Each Nation

Country	N	Mean (SD)				
		Job Satisfaction	Work Engagement	Subjective Well-being	Job Insecurity	Employability
Albania	424	-0.19 (0.75)	3.85 (0.71)	4.15 (0.95)	2.48 (1.27)	2.55 (1.48)
Austria	725	0.11 (0.67)	3.99 (0.66)	4.57 (0.99)	1.90 (1.12)	2.80 (1.37)
Belgium	1724	0.06 (0.64)	4.09 (0.67)	4.44 (1.04)	1.95 (1.25)	2.80 (1.43)
Bulgaria	678	0.06 (0.75)	3.98 (0.77)	4.41 (1.06)	2.21 (1.16)	2.60 (1.38)
Croatia	714	-0.20 (0.75)	3.73 (0.75)	4.37 (0.96)	2.28 (1.30)	2.37 (1.37)
Cyprus	698	0.05 (0.69)	3.82 (0.70)	4.35 (0.93)	2.49 (1.17)	2.53 (1.26)
Czech	714	0.00 (0.67)	3.77 (0.67)	4.64 (0.81)	2.50 (1.18)	2.57 (1.20)
Denmark	830	0.34 (0.60)	4.11 (0.52)	4.55 (0.84)	1.58 (1.19)	3.25 (1.46)
Estonia	774	0.00 (0.60)	3.89 (0.61)	4.45 (0.87)	2.35 (1.26)	2.92 (1.36)
Finland	731	0.18 (0.59)	3.93 (0.57)	4.53 (0.80)	1.86 (1.32)	2.89 (1.48)
France	1188	-0.17 (0.68)	3.96 (0.67)	4.19 (1.09)	1.82 (1.28)	2.78 (1.44)
FYROM	642	0.08 (0.78)	4.17 (0.76)	4.70 (1.12)	1.90 (1.36)	2.36 (1.59)
Germany	1434	-0.03 (0.68)	3.74 (0.65)	4.50 (0.89)	1.85 (1.11)	2.87 (1.30)
Greece	473	-0.11 (0.63)	3.79 (0.66)	4.42 (0.86)	2.68 (1.22)	2.04 (1.18)
Hungary	596	-0.10 (0.73)	3.73 (0.83)	4.39 (0.94)	2.27 (1.31)	2.69 (1.28)

Ireland	652	0.16 (0.70)	4.13 (0.66)	4.57 (0.97)	1.90 (1.23)	2.85 (1.46)
Italy	668	-0.26 (0.63)	3.76 (0.73)	4.18 (0.99)	2.56 (1.24)	2.45 (1.16)
Latvia	591	-0.16 (0.71)	3.78 (0.75)	4.32 (1.02)	2.46 (1.29)	2.61 (1.31)
Lithuania	706	-0.20 (0.69)	4.15 (0.60)	4.44 (0.96)	2.30 (1.18)	2.92 (1.30)
Luxembourg	646	0.02 (0.73)	4.00 (0.75)	4.26 (1.11)	1.60 (1.09)	2.67 (1.47)
Malta	710	0.05 (0.71)	4.07 (0.68)	4.35 (0.91)	1.53 (0.95)	2.94 (1.47)
Montenegro	580	-0.12 (0.71)	3.69 (0.82)	4.44 (0.97)	2.27 (1.28)	2.59 (1.35)
Netherlands	730	0.17 (0.63)	4.16 (0.63)	4.60 (0.99)	2.13 (1.44)	2.67 (1.50)
Norway	850	0.36 (0.58)	4.02 (0.56)	4.56 (0.84)	1.55 (1.13)	3.32 (1.51)
Poland	733	-0.11 (0.67)	3.90 (0.73)	4.31 (0.95)	2.62 (1.18)	2.94 (1.11)
Portugal	521	0.03 (0.64)	3.75 (0.74)	4.52 (0.93)	2.50 (1.26)	2.03 (1.16)
Romania	622	0.08 (0.61)	3.97 (0.64)	4.51 (0.86)	2.14 (1.22)	2.88 (1.35)
Serbia	574	-0.30 (0.76)	3.50 (0.88)	4.26 (1.07)	2.55 (1.44)	2.54 (1.39)
Slovakia	642	-0.28 (0.69)	3.75 (0.74)	4.19 (1.06)	1.90 (1.02)	2.46 (1.26)
Slovenia	1139	-0.12 (0.77)	3.94 (0.74)	4.41 (1.06)	2.37 (1.47)	2.46 (1.50)
Spain	2009	-0.07 (0.77)	3.84 (0.81)	4.69 (1.00)	2.44 (1.47)	2.52 (1.39)
Sweden	842	0.03 (0.61)	3.90 (0.61)	4.38 (0.98)	1.79 (1.31)	3.34 (1.37)
Switzerland	748	0.18 (0.63)	4.01 (0.67)	4.61 (0.97)	1.90 (1.14)	3.03 (1.32)
Turkey	1180	0.09 (0.76)	3.63 (0.89)	4.25 (1.10)	2.13 (1.31)	3.32 (1.39)
UK	1186	0.10 (0.69)	3.89 (0.70)	4.18 (1.11)	1.95 (1.17)	3.15 (1.34)

Note: Items in the job satisfaction measure were standardized in the total sample prior to calculating the composite score.

Table 2

Means, Standard Deviations, and Correlations Among Study Variables in the Combined Samples

Variable	Mean	SD	1	2	3	4	5	6	7	8
1 JS	0.00	0.70								
2 WE	3.90	0.72	0.542***							
3 SWB	4.43	0.99	0.456***	0.491***						
4 JI	2.11	1.29	-0.244***	-0.186***	-0.125***					
5 EM	2.77	1.41	0.113***	0.075***	0.082***	-0.022***				
6 Gender ^a	1.51	0.50	-0.017**	0.047***	-0.049***	-0.015*	-0.038***			
7 Age	41.78	11.95	-0.065***	0.046***	-0.035***	-0.060***	-0.247***	0.015*		
8 Sup Pos	2.12	24.48	0.022***	0.027***	0.010	-0.025***	-0.007	-0.032***	0.029***	
9 Education ^b	4.98	1.72	0.153***	0.115***	0.038***	-0.093***	0.076***	0.099***	-0.043***	0.046***

Note: JS = job satisfaction; SWB = subjective well-being; WE = work engagement; JI = job insecurity; EM = employability; Sup Pos = supervisor position/number of employees supervised.

^a 1 = male; 2 = female.

^b The education category is same as the International Standard Classification of Education.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 3

Multilevel Estimates for Models Predicting Job Satisfaction

	Individualism Collectivism	Uncertainty Avoidance	Masculinity Femininity
Intercept	-0.0594	-0.0592	-0.0571
Job Insecurity	-0.1609***	-0.1607***	-0.1597***
Employability	0.0545***	0.0546***	0.0538***
Gender	-0.0361***	-0.0364***	-0.0363***
Age	-0.0029***	-0.0029***	-0.0029***
Education	0.0473***	0.0473***	0.0472***
Supervisor Position	0.0002	0.0002	0.0002
Culture	0.0013	-0.0019	-0.0016
Job Insecurity × Employability	0.0201***	0.0206***	0.0228***
Job Insecurity × Culture	0.0009	-0.0004	-0.0008
Employability × Culture	0.0002	0.0002	0.0011**
Job Insecurity × Employability × Culture	0.0007**	-0.0005*	0.0009***

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 4

Multilevel Estimates for Models Predicting Work Engagement

	Individualism Collectivism	Uncertainty Avoidance	Masculinity Femininity
Intercept	-0.5339***	-0.5339***	-0.5320***
Job Insecurity	-0.1660***	-0.1664***	-0.1656***
Employability	0.0878***	0.0887***	0.0877***
Gender	0.0713***	0.0712***	0.0713***
Age	0.0052***	0.0052***	0.0052***
Education	0.0405***	0.0405***	0.0403***
Supervisor Position	0.0007**	0.0007**	0.0007**
Culture	0.0031	-0.0015	-0.0019
Job Insecurity × Employability	0.0061	0.0065	0.0087
Job Insecurity × Culture	0.0003	-0.0002	-0.0016***
Employability × Culture	-0.0001	0.0002	0.0008
Job Insecurity × Employability × Culture	0.0006	-0.0005*	0.0009***

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 5

Multilevel Estimates for Models Predicting Subjective Well-being

	Individualism Collectivism	Uncertainty Avoidance	Masculinity Femininity
Intercept	0.1741***	0.1727***	0.1771***
Job Insecurity	-0.1353***	-0.1351***	-0.1340***
Employability	0.0883***	0.0882***	0.0877***
Gender	-0.1117***	-0.1121***	-0.1122***
Age	-0.0015**	-0.0015**	-0.0016**
Education	0.0101**	0.0101**	0.0099**
Supervisor Position	0.0002	0.0002	0.0002
Culture	-0.0013	0.0004	-0.0012
Job Insecurity × Employability	0.0128*	0.0142*	0.0154**
Job Insecurity × Culture	0.0006	0.0005	-0.0007
Employability × Culture	-0.0001	0.0000	0.0011**
Job Insecurity × Employability × Culture	0.0006	-0.0005	0.0008**

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 6

Slopes for Job Insecurity at Varying Levels of Employability and Culture

	Job Satisfaction		Work Engagement		Subjective Well-Being	
	Low EM	High EM	Low EM	High EM	Low EM	High EM
Low I/C	-0.185	-0.166	-0.167	-0.173	-0.148	-0.141
High I/C	-0.176	-0.110	-0.178	-0.144	-0.148	-0.100
Low UA	-0.183	-0.121	-0.180	-0.144	-0.169	-0.119
High UA	-0.179	-0.159	-0.165	-0.176	-0.128	-0.122
Low M/F	-0.144	-0.138	-0.117	-0.142	-0.115	-0.122
High M/F	-0.220	-0.135	-0.231	-0.172	-0.183	-0.115

Note: I/C = individualism-collectivism; UA = uncertainty avoidance; M/F = masculinity-femininity; EM = employability. I/C is scored so that higher values indicate higher individualism (lower collectivism); M/F is scored so that higher values indicate higher masculinity (lower femininity). The slope was estimated at +1 standard deviation (i.e., high) and -1 standard deviation (i.e., low) from the mean. All slope estimates were significant with $p < 0.01$.

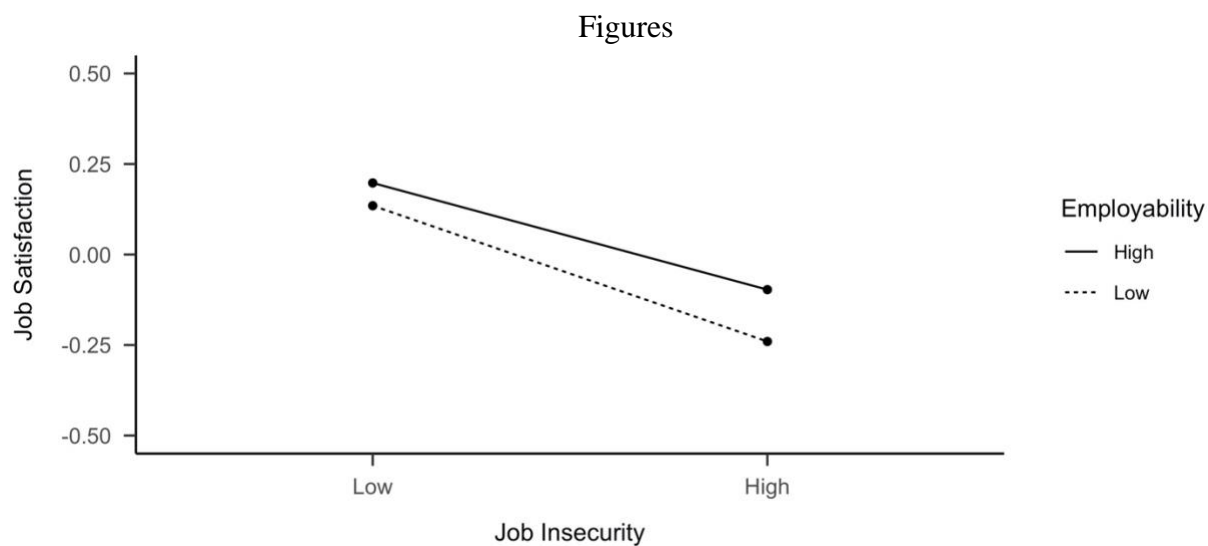


Figure 1. Two-way interaction effect of individual-level job insecurity and individual-level employability in predicting job satisfaction.

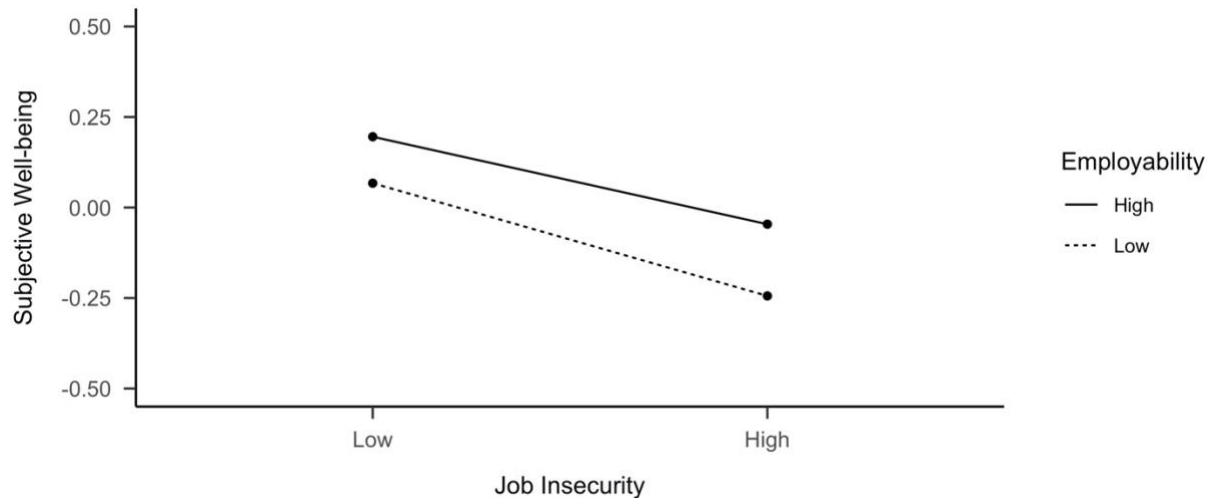


Figure 2. Two-way interaction effect of individual-level job insecurity and individual-level employability in predicting subjective well-being.

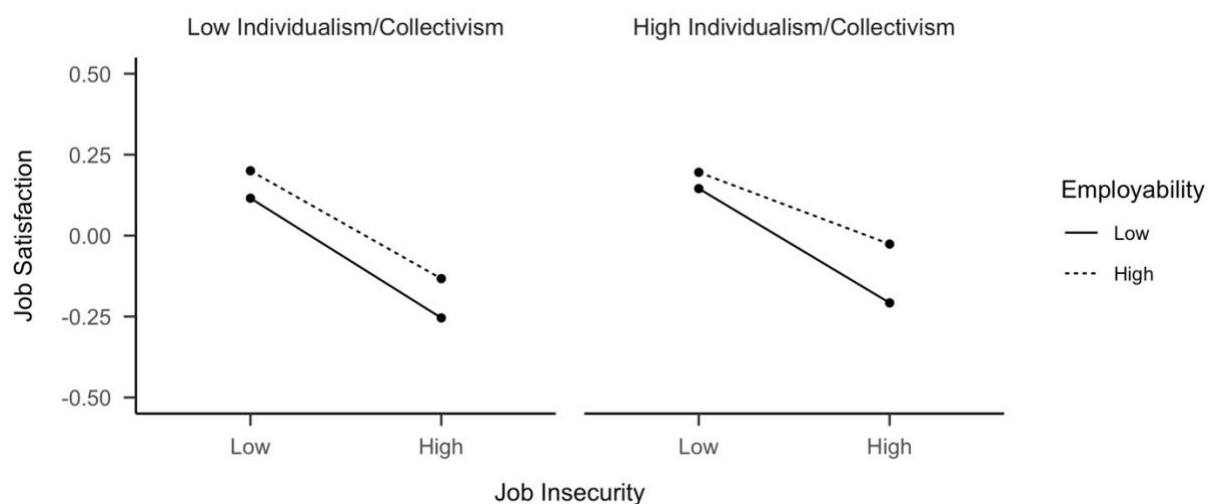


Figure 3. Cross-level three-way interaction effect of country-level individualism-collectivism (I/C), individual-level job insecurity, individual-level employability in predicting job satisfaction (high in I/C indicates countries that are more individualistic).

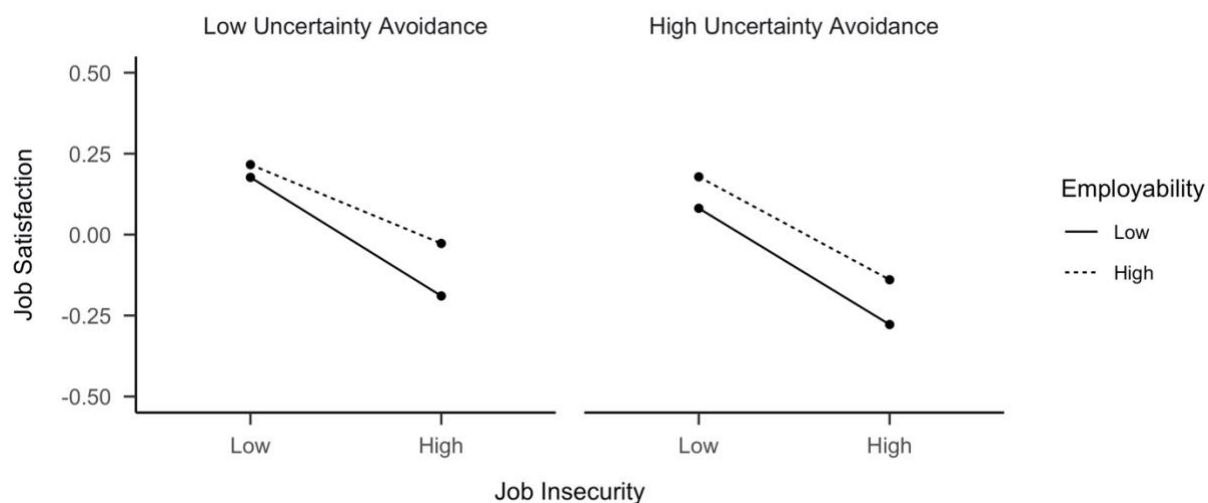


Figure 4. Cross-level three-way interaction effect of country-level uncertainty avoidance, individual-level job insecurity, individual-level employability in predicting job satisfaction.

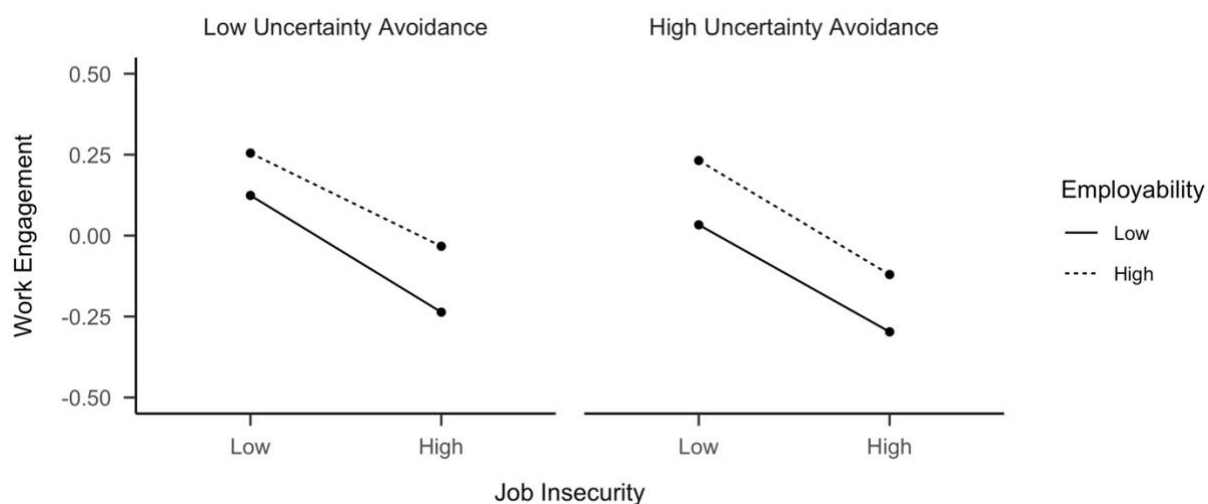


Figure 5. Cross-level three-way interaction effect of country-level uncertainty avoidance, individual-level job insecurity, individual-level employability in predicting work engagement.



Figure 6. Cross-level three-way interaction effect of country-level masculinity/femininity (M/F), individual-level job insecurity, individual-level employability in predicting job satisfaction (high in M/F indicates countries that are more masculine).



Figure 7. Cross-level three-way interaction effect of country-level masculinity/femininity (M/F), individual-level job insecurity, individual-level employability in predicting work engagement (high in M/F indicates countries that are more masculine).

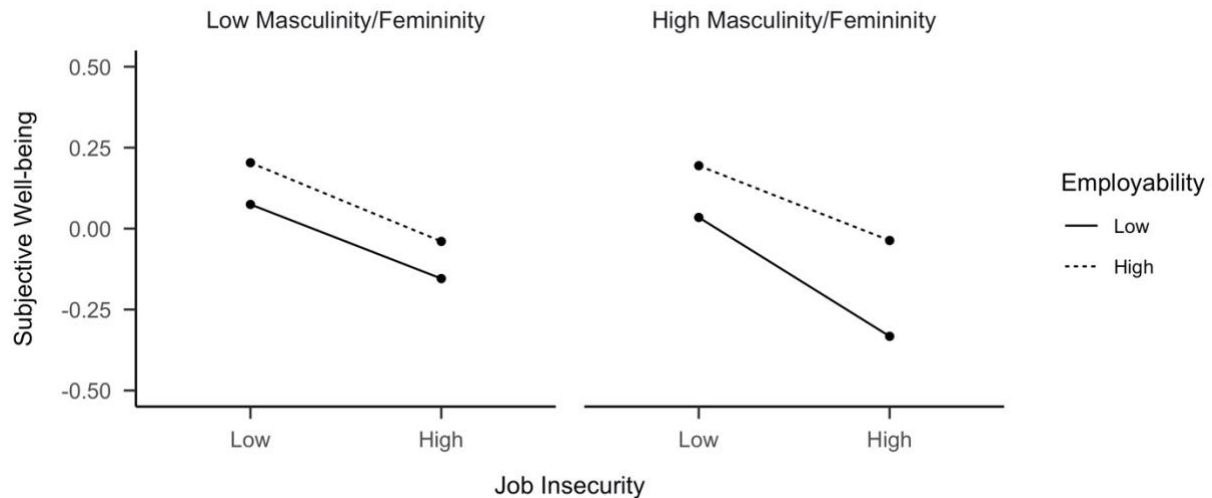


Figure 8. Cross-level three-way interaction effect of country-level masculinity/femininity (M/F), individual-level job insecurity, individual-level employability in predicting subjective well-being (high in M/F indicates countries that are more masculine).