Abstract

This study aims to propose a theoretical model that explains the psychological processes underlying the job insecurity-performance relationship. To accomplish this goal, we draw on a twodimensional stressor framework. Job insecurity may undermine performance through a hindrance effect, because it causes strain reactions and withdrawal behaviours. In contrast, it can trigger productive behaviours as a form of job preservation strategy, when reacting actively. These competing predictions are integrated in the same structural equation modeling by testing the negative indirect effect of job insecurity on task and contextual performance, mediated by job satisfaction and affective commitment. The positive challenge effect is examined by testing the remaining direct path to performance. To provide convergence of evidence, two studies were conducted with the purpose to replicate patters and findings across different measures and samples. The results provide support only for negative and passive reactions to job insecurity, leading to lower performance.

Keywords: job insecurity, task and contextual performance, hindrance and challenge effect, active and passive reactions

Understanding the Relationship Between Job Insecurity and Performance: Hindrance or Challenge Effect?

Employees around the world today face increasing uncertainty due to transformative technological, economic and political changes. As a result, stability and predictability have been replaced by job insecurity, defined as the perceived threat to the continuity of one's current employment (De Witte, Vander Elst, & De Cuyper, 2015). Research has shown that the anticipation of a possible job loss is stress inducing, traumatic, and life disrupting (e.g., Keim, Landis, Pierce, & Earnest, 2014). As an important work stressors, job insecurity is related to detrimental consequences affecting both individuals and their organisations (e.g., Jiang & Lavaysse, 2018). However, while the literature weighs in convincingly on negative effects for personal health and work attitudes, the link between job insecurity and job performance is less clear-cut. Many studies point to a negative association, also confirmed by two meta-analyses (Cheng & Chan, 2008; Gilboa, Shirom, Fried, & Cooper, 2008). Others found that job insecurity exhibits a small positive (Probst, Stewart, Gruys, & Tierney, 2007; Staufenbiel & König, 2010) or no significant (Loi, Ngo, Zhang, & Lau, 2011; Schreurs, Hetty van Emmerik, Günter, & Germeys, 2012) relationship with different facets of performance; and still others have shown that this mixed evidence can be explained by a curvilinear effect (Mäder & Niessen, 2017; Selenko, Makikangas, Mauno, & Kinnunen, 2013). Inconsistent findings have persisted in more recent research too, as underlined in the last two reviews on job insecurity (Lee, Huang, & Ashford, 2018; Shoss, 2017).

In the current working environment characterized by a constant flux of change, which oftentimes evokes feelings of job insecurity, employees need to deal with new demands or master unfamiliar tasks. Job performance is a key area for managers, so gaining a more complete understanding of the job insecurity-performance relationship may help organisations in guiding efforts to manage stress reactions and to support organisational effectiveness. In particular, identifying the individual processes that account for high performance represents a constant quest for HR practitioners.

Therefore, the purpose of this study is to provide a conceptual framework that addresses the psychological mechanisms underlying the performance responses to job insecurity. In doing so, we draw on the two-dimensional stressor model according to which any stressor reflects two basic dimensions, hindrance and challenge (LePine, Podsakoff, & LePine, 2005). A hindrance stressor is defined as an undesirable work-related demand that interferes with task accomplishment. Instead, a challenge stressor is seen as a job demand creating the opportunity for better work achievements. Specifically, a stressor such as job insecurity may undermine performance because it causes strain reactions and withdrawal behaviours (hindrance effect). By contrast, it could trigger productive behaviours when one copes with it actively by exerting extra effort to demonstrate their worth, as a form of job preservation strategy (challenge effect). This prospective aligns with the coping process, which involves cognitive and behavioural efforts to master or reduce the demands created by the stressful situation (Lazarus & Folkman, 1984). In particular, Podsakoff (Podsakoff, LePine, & LePine, 2007) found that hindrance stressors are associated to negative emotions and attitudes and, through these effects, related with behavioural withdrawal. These reactions are considered as indirect and passive coping strategies. Instead, challenge stressors are directly related to increased performance and reflect a form of proactive coping capturing job preservation efforts. We propose to probe the balance between these competing predictions in the same mediational model by first testing the negative indirect effect of job insecurity on performance, through job satisfaction and affective commitment. This captures the view of job insecurity as a hindrance stressor and the passive way of coping with it. The remaining direct path from job insecurity to performance should reflect the positive challenge effect, like an active coping strategy. Our study therefore aims to propose a theoretical explanation by taking into account both potential active and passive reactions with the associated coping dynamics.

Furthermore, in order to have a complete account of performance two different facets are included in the model: required tasks and organisational citizenship behaviours. A plausible assumption is that behavioural reactions to job insecurity may differ according to the value that

employees attribute to specific facets of performance. For example, employees may feel that productive behaviours are more relevant to job preservation than contextual behaviours (Huang, Zhao, Niu, Ashford, & Lee, 2013).

Finally, we provide a convergence of evidence by conducting two studies that replicate patterns and findings across different measures and samples. This aligns with the recent criticism of psychological science for a lack of reproducibility tests (e.g., (e.g., Open Science Collobaration, 2015; Pashler & Wagenmakers, 2012). In this way we aim to capture other aspects of the proposed constructs and to test the model with two categories of workers who may react differently to job insecurity, as shown in some articles (Lee et al., 2018). Consistent results across the two studies would add strength to the view that job insecurity conforms to producing a general pattern of performance effects.

Job Insecurity and Performance: Hindrance Effect

Our perspective considers job insecurity as a subjective experience resulting from an individual's perception of the actual working situation (De Witte et al., 2015). According to this definition, not all employees are equally affected and people may experience varying degrees of uncertainty, even if they are objectively in the same work situation. As such, job insecurity may trigger differing reactions. With respect to the effects on performance, empirical evidence found positive, negative or non-linear associations, without reaching a consensus on this link (Lee et al., 2018). Our proposal is to understand how job insecurity is related to performance by using the hindrance-challenge occupational stressor model (LePine et al., 2005). We draw on this framework because, unlike traditional theory, it provides a negative and positive perspective on stressors, thus emphasizing the possibility of not only harmful effects. In this way, it takes into account the different coping reactions that a stressor such as job insecurity can trigger, passive or active reactions. Specifically, the extent to which a stressor will influence performance depends on the affective, cognitive and behavioural reactions to this stressor. Hindrance stressors include work-related demands that interfere with work achievements and they are associated with passive coping strategies (Edwards,

Franco-Watkins, Cullen, Howell, & Acuff, 2014). In the view of job insecurity as a hindrance stressor, the studies show that it evokes negative affective and psychological reactions, which then distract from the task (withdrawal behaviour). This means that three elements are involved in the process: job insecurity is associated to specific attitudes and, through these effects, related with performance behaviours. We first focus on the job insecurity-work attitudes link. Specifically, psychological coping reactions are directed to deal with strain resulting from a potential job loss and can be manifested in lower job satisfaction and affective commitment. On this line of reasoning, recent research has categorized together these work attitudes following stress theory. Vander Elst and colleagues (Vander Elst, De Cuyper, Baillien, Niesen, & De Witte, 2016) found that when employees perceive the probability of job loss, they evaluate such a threat as difficult to manage because it may result from unchangeable factors like the economic situation or organisational restructuring. Therefore, job insecure individuals will more likely engage in coping strategies that try to regulate their emotions and distress related to that threat (Lazarus & Folkman, 1984). One way of dealing with such an uncontrollable job situation is to psychologically increase the distance between oneself, and the job and the organisation (psychological withdrawal), in order to reduce the negative impact of a possible job loss (Piccoli, De Witte, & Reisel, 2017). As a result, lower job satisfaction and affective commitment are considered psychological coping reactions frequently associated with job insecurity.

In particular, these two attitudes have several similarities, as shown in other studies (e.g., Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Both include an emotional component. On the one hand, job satisfaction refers to an emotional state resulting from the evaluation of one's job experience (e.g., Harrison, Newman, & Roth, 2006). Consequently, reduced job satisfaction is an attitudinal reaction directed at the individual him- or herself and one's position. On the other hand, affective commitment is the component based on the emotional attachment to and psychological identification with the organisation. Therefore, when employees decrease their affective commitment, they attitudinally withdraw from the organisation by reducing their identification with

it. In the Allen & Meyer's (Allen & Meyer, 1990) three-component model, affective commitment is the most strongly overlapping in constitutive and operational definition with job satisfaction, and it has also been termed "attitudinal commitment" (Riketta, 2002). In effect, several scholars (e.g., Harrison et al., 2006) noted considerable theoretical overlap between job satisfaction and affective commitment, remarking that the only difference is the conceptual target: one's position or the entire organisation. These two constructs are also highly correlated and, in the job insecurity literature, two meta-analyses (Cheng & Chan, 2008; Sverke, Hellgren, & Näswall, 2002) reported similar strength of relationships between job insecurity-job satisfaction versus job insecurity-commitment. Consequently, we propose to combine job satisfaction and commitment into a common latent factor (work attitudes) for the reasons mentioned above: (a) they share the same conceptual domain, (b) they are highly correlated, (c) they have been categorized together as coping reaction to job insecurity, (d) they show similar strength of relationships with job insecurity. Based on these arguments, we expect the following:

Hypothesis 1: Job insecurity is negatively related to job satisfaction and affective commitment (work attitudes).

Job insecurity as a hindrance stressor triggers negative affective and psychological reactions which have a net effect of distracting effort away from performance-related objective and diverting attention to coping with the stressor. Therefore, employees may also withdraw from the job by investing little and keeping efforts minimal, resulting in low levels of performance (behavioural withdrawal). In order to have a complete account of performance, our model includes two different facets, task and contextual behaviours. Task performance is conceptualized as the degree to which an employee meets expectations about focal role requirements (Harrison et al., 2006). Instead, contextual or extra-role performance is associated with the level of effort that an employee exerts beyond the core job tasks. The literature identifies organisational citizenship behaviours (OCB) as the most important contextual performance because they are helpful behaviours that support the social fabric of the organisation. In general, performance behaviours are better predicted by work attitudes, for well-known theoretical and empirical reasons. Specifically, the theory of planned behaviour (Ajzen & Fishbein, 1980) is the main explanation proposed on why work attitudes are guidelines and facilitators of performance.

In summary, the hindrance effect of job insecurity manifests itself through psychological withdrawal (lower job satisfaction and affective commitment) and behavioural withdrawal (lower task and contextual performance) because it reflects a passive and indirect coping process. According to this perspective, job insecurity makes it difficult for employees to devote the energy and attention to perform. This results in the following mediational hypotheses:

Hypothesis 2: Job insecurity is negatively related to task performance through job satisfaction and affective commitment (work attitudes).

Hypothesis 3: Job insecurity is negatively related to OCB through job satisfaction and affective commitment (work attitudes).

Job Insecurity and Performance: Challenge Effect

In the view of job insecurity as a challenge effect, the reactions to the threat of job loss trigger productive behaviours. Specifically, challenge stressors are work-related demands that may create high performance opportunities if one is able to overcome the difficult situation they present. This perception is more likely to lead to active coping strategies (e.g., on-task effort), which may yield positive outcomes in terms of performance (Edwards et al., 2014). In the case of job insecurity, employees may see that their contributions help the organisation succeed which indirectly enhances the security of their job. In this perspective, increasing performance represents a proactive behaviour motivated by the fear of losing the job. This job preservation strategy can take different forms. For example, employees might endeavour to show their value to the employer by devoting extra effort toward behaviours that will be noticed, such as in-role and extra-role behaviours, which are typically rewarded by the organisation (Fischmann, De Witte, Sulea, & Iliescu, 2018). Such efforts can aim to gain instrumental support from the employer and they are seen an a form of

impression management strategy (Huang et al., 2013). These strategies have a dual objective. First, they may reduce employees' feelings of job insecurity as they lead individuals to gain some control in the environment by taking proactive actions (Lam, Liang, Ashford, & Lee, 2015). Second, impression management strategies may increase the actual security of the job by giving managers a more positive impression of the employee.

This perspective also aligns with the recent job preservation motivation theory (Shoss, 2017) according to which when employees perceive job insecurity they may intensify their efforts as a way to "earn" the right to keep their job (Fischmann et al., 2018).

Therefore, in the view of a positive relationship between job insecurity and performance (challenge effect), employees' behaviours are not regulated by emotion management to reducing the negative impact of job insecurity, but they are directly instrumental in achievement more job security. In this case, the experience of job insecurity may act as a motivator of positive reactions, leading to work harder. Based on these arguments, the following hypothesis is proposed:

Hypothesis 4: Job insecurity is positively related to (a) task and (b) contextual performance (challenge effect).

As reasoned earlier, we test two competing predictions in the same mediational model in order to examine the balance of negative and potential positive effects of job insecurity on performance, as an expression of different coping strategies. Moreover, to provide convergence of evidence two studies were designed with the purpose to replicate patters and findings across different measures and samples. In particular, we can predict that the job insecurity-performance relationship might be positive with a category of more skilled and well-paid workers, who typically react less strongly to uncertainty, and in a cultural context of flexibility and openness to change.

STUDY 1: METHOD

Participants and procedure

We administered a survey to employees working in a manufacturing company located in Italy. All participants involved (N = 302) were blue-collar workers, a less studied group in the job insecurity literature compared to other occupational categories (Piccoli et al., 2017). Seventy-eight percent of the respondents were male and 22 percent were female. The mean age was 38.3 years (SD = 6.1). Most participants (74 percent) were employed on a permanent base and about half of them (51 percent) had been working in the company for more than 10 years. The procedure employed was to first explain the purpose of the study to the head of the organisation. After having obtained authorization to begin, employees filled out paper questionnaires in meetings organized during working hours, with participation being voluntary (no incentive offered). Employees were provided with information about the content and the aim of the study, as well as on confidentiality and anonymity of data. They were also informed that none of the data would be available to the employer, just members of the research team. Moreover, supervisors were not present during the administration of the questionnaire. The response rate was 72%.

Measures

The measures described below are self-reported and use a Likert response scale ranging from 1 (= strongly disagree/ never/ very badly) to 5 (= strongly agree/ always/ very well). All the scales showed good internal consistency, with Cronbach's alpha coefficients ranging from .73 to .83. *Job Insecurity* was measured using 4 items from Vander Elst, De Witte and De Cuyper (2014). Items were intended to measure both the likelihood as well as the worries of losing the job. A sample item is: "Chances are, I will soon lose my job". This scale has been validated across five European countries and the results have shown its construct validity and criterion validity (with respect to affective commitment, general health and self-reported performance). The Cronbach's α of the scale ranged between .82 and .88, depending on the country in which it was tested. In our study, α was .81.

Job Satisfaction was considered globally, as a general evaluation of one's job experience. It was assessed using 3 items from the scale of Price (1997). A sample item is: "I find enjoyment in my

job." The reliability, construct validity, and criterion-related validity of this scale have been evidenced in other studies (Vander Elst et al., 2016). This measure also showed good reliability in our study ($\alpha = .83$).

Affective Commitment refers to the emotional attachment to the organisation and it is the core essence of organisational commitment. It was measured with 4 items from the Allen and Meyer (1990) scale. A sample item is "This organisation has a great deal of personal meaning for me". Numerous studies across several countries have assessed the reliability and validity of this scale (see for example the meta-analysis of Meyer, Stanley, Herscovitch and Topolnytsky, 2002). The coefficient α in the present study was .83.

Task Performance. Self-rated performance was obtained using 4 items from Abramis (1994). The measure of task or in-role behaviours is indicated by the author as technical performance. Respondents were asked to evaluate the quality of their performance during the last working week. An example is "How well did you fulfil the following tasks? Achieve your objectives". The answers ranged from very badly (1) to very well (5). This measure of self-rated performance has been successfully used in other studies (e.g., Sverke et al., 2002; Vander Elst et al., 2016), demonstrating its reliability and validity. In the current sample, α was .76.

Contextual Performance refers to organisational citizenship behaviours and, in particular, to those behaviours of responsible and constructive involvement in the political process of the organisation. These extra-role behaviours were measured with 4 items from the scale of Podsakoff, MacKenzie, Moorman and Fetter (1990). A sample item is "I attend functions that are not required but help the company image. The scale ranged from never (1) to always (5). This measure of OCB has been used extensively in the literature for its good reliability, construct validity, and criterion-related validity (with respect to performance, rewards and turnover) across different contexts (Podsakoff, Whiting, Podsakoff, & Blume, 2009). In our study, α was .73.

Results

Data were first screened for missing cases and outliers. In particular, the number of cases with missing data was less than 5%. As Little's missing completely random (MCAR) test found that missing values were randomly distributed across all observations, we employed listwise deletion. Moreover, no outliers were identified by Mahalanobis *d*-squared values. In addition, in our mediational analyses the procedure of bootstrap was used to overcome potential issues related to the assumption of normality of the sampling distribution.

Table 1 presents reliabilities, descriptive statistics, and inter-correlations of the measured variables. As has been found in prior research, job insecurity was negatively correlated to job satisfaction, affective commitment, task and contextual performance. Furthermore, job satisfaction and affective commitment were positively related to both task and contextual performance. Finally, job satisfaction and affective commitment showed a high correlation (r = .69), which further justifies the combination of the two variables into a common construct.

Insert Table 1 about here

Using Mplus 7 (Muthén & Muthén, 2012), the data were first analysed in order to evaluate the construct validity of the scales. In particular, we performed a series of confirmatory factor analysis (CFA) in which the hypothesized measurement model was compared with alternative models. In the hypothesised four-factor model (M1), all items loaded on the corresponding latent variable: job insecurity, work attitudes (i.e., job satisfaction and affective commitment), task performance and contextual performance. This model showed a good fit to the data: $\chi^2_{(130)}$ = 368.41; NNFI = .91; CFI = .92; RMSEA = .06 with C.I.= .07 ~ .08; SRMR = .05. Factor loadings of all variables were acceptable, ranging from .63 to .87. The competing models were a three-factor model (M2) to examine the divergent validity: one factor for job insecurity, another latent factor representing the mediator (work attitudes) and a third factor for the outcome (task and contextual performance); a one-factor model (M3) in which all items loaded on the same factor. This model was included to provide an indication whether a single factor accounts for the covariances among the items, as the

data may be closely related in cross-sectional research (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The risk of common method variance was further tested with a model in which the items loaded on the expected latent factor, as well as on a latent common method factor (Conway & Lance, 2010). This common factor model (M4) enabled the estimation of the proportion of variance explained by the common method factor.

On the basis of the fit indices and the chi-square difference test, the hypothesized measurement model fitted the data better than each of the alternative models (Table 2). In particular, the fit indices of the one-factor model were not acceptable. In the common method model, only 11% of the variance was explained by the common method factor, which is below the threshold of 25% suggested (Williams, Cote, & Buckley, 1989). Consequently, the results of the last two models suggest that common method variance does not significantly influence our results. We therefore decided to work with the suggested four-factor model to test the study hypotheses.

Insert Table 2 about here

A mediational model with direct and indirect effects was proposed and tested for our hypotheses. The maximum likelihood method of estimation was selected. For inference about the significance of indirect effects, we used the bootstrapping method to overcome potential issues related to unmet assumptions of the normal sampling distribution (Preacher & Hayes, 2008). 99% Bootstrap confidence intervals (10.000 samples) for indirect effects were performed to evaluate whether they included zero.

In accordance with H1, job insecurity was negatively related to job satisfaction and affective commitment ($\beta = -.46$; p < .001). Furthermore, they mediated the relationship between job insecurity and task performance (indirect effect: $\beta = -.13$; bootstrap CI: $-.25 \sim -.02$), supporting H2. Job insecurity was also related to contextual performance indirectly through job satisfaction and affective commitment (indirect effect: $\beta = -.23$; bootstrap CI: $-.38 \sim -.13$), in line with H3. Both indirect effects were significant and negative, supporting the view of the hindrance stressor.

However, the direct path from job insecurity to task performance was negative and not significant $(\beta = -.04; p = .58)$, as well as the direct effect on contextual performance $(\beta = -.14; p = .07)$. These results do not support H4a and H4b, and rule out any challenge effect. Figure 1 (coefficients in normal font) shows the model specified with standardized path coefficients. This is a full mediational model and provides a good fit to the data: $\chi^2_{(131)} = 378.80$; NNFI = .90; CFI = .91; RMSEA = .07 with CI = .06 ~ .07; SRMR = .07.

Insert Figure 1 about here

STUDY 2: METHOD

To constructively replicate the results of Study 1, several changes were made in Study 2. First, different internationally validated measures were used to capture other aspects of the constructs included in the model and to evaluate the possibility of strengthening reliability. Second, since the direct and challenge effect from job insecurity to performance was not significant in Study 1, we collected data from another category, white-collar workers. This is because research has demonstrated that blue-collar workers (in Study 1) react more strongly to the perceived threat of unemployment owing to their more economic dependency on paid work (Sverke et al., 2002). They are also exposed to higher degrees of uncertainty since they are often less skilled and less well-paid (Näswall & De Witte, 2003). For these reasons job insecurity could evoke more negative and passive reactions in this category of workers. Third, in order to still understand the non-significant challenge effect from Study 1, we chose a sample from another country, the U.S. There are some cultural reasons to suppose the U.S. sample might operate differently than the Italian sample. In particular, in the States the culture is known to embrace more flexibility and openness to change. Acceptance of uncertainty is usually better tolerated within the U.S. economy (Hoppe & Bhagat, 2007). Therefore, we could expect that this cultural profile offers opportunity to find that job insecurity operates as a challenge stressor.

Participants and procedure

The U.S. data was collected from a heterogeneous sample of 320 professionals attending a part-time (evening) MBA programme. The participants held managerial positions across a wide range of industries including technology, banking, services, engineering, hospitality, and retail. The employees were invited to voluntarily participate in an online survey in which the information on the research objective was provided, as well as assurance of confidentiality. The response rate was 51%. The subjects averaged 36 years old and thirty-four percent were female (110). With regard to tenure, the participants had been working in their current company for an average of 4 years.

Measures

As for Study 1, all scales were measured on a five-point Likert-type scale ranging from 1 to 5 and they showed good reliabilities (see Table 1).

Job Insecurity was assessed by 5 items from Francis and Barling (2005) measuring the perception of the likelihood of losing the job. A sample item is "I am not really sure how long my present job will last". Their original scale had a Cronbach's α of .81 and correlated positively with distributive, procedural and interactional injustice. The coefficient α in the present study was .77. *Job Satisfaction* was measured with 3 items from Judge, Scott and Ilies (2006). A sample item is "At this moment, I am finding real enjoyment in my work". This scale is a short and validated version of the Brayfield and Rothe's (1951) Overall Job Satisfaction Measure, used extensively in the literature. Cronbach's alpha in the present study was 81, indicating good internal reliability. *Affective Commitment* was assessed by 4 items from Allen and Meyer (1990). An example of an item is "I would be very happy to spend the rest of my career with this organisation". This measure was used as numerous studies across several countries have assessed the reliability and validity of this scale (e.g., Meyer, Stanley, Herscovitch & Topolnytsky, 2002). The coefficient α in our sample was .83.

Task Performance. Self-reported performance was measured with 2 items designed for this study. One item is "I would say my current performance..." with choices ranging from 1 (well below expectations) to 5 (greatly exceeds expectations). The Cronbach's alpha for this measure was .70 *Contextual Performance* was measured with 3 items from Van Dyne's Organizational Citizenship Behavior scale (1994). These items tap into helping behaviours and loyalty to the organisation. A sample item is "I search for new ideas to improve operations". This measure is well established in the literature on organizational behaviour (Barling & Cooper, 2008) and in the original version both supervisor-reported and self-reported data on OCB were used to assess the reliability (α from .68 to .95) and factor structure of this instrument. In our sample, α was .69.

Results

Data were first screened for missing cases and outliers following the same procedures as in the Italian sample. Internal consistencies, means, standard deviations and correlations between the variables of Study 2 are shown in Table 1. As for Study 1, job insecurity was negatively associated with all study variables. Work attitudes were positively correlated to both facets of performance. Finally, there was a high correlation between job satisfaction and affective commitment (r = .70).

In the following step, we conducted confirmatory factor analysis (CFA) and we tested for common method bias by comparing the hypothesised model with three alternative models (as in Study 1). The hypothesised four-factor model (job insecurity, work attitudes, task performance, and contextual performance) yielded an acceptable fit to the data: $\chi^2_{(99)} = 285.61$; NNFI = .90; CFI = .92; RMSEA = .07 with C.I.= .07 ~ .09; SRMR = .06. This measurement model fitted the data better than the competing models (see the results in Table 3). Common method variance was ruled out, as the common method factor explained only 8% of the variance.

Insert Table 3 about here

To test our hypotheses in the U.S. sample, a mediational model was constructed following the same analysis strategy of Study 1. The results showed that job insecurity was negatively related to

job satisfaction and affective commitment ($\beta = -.32$; $p \le .001$), in line with H1. H2 was also supported, because these work attitudes mediated the relationship between job insecurity and task performance (indirect effect: $\beta = -.07$; bootstrap CI: $-.13 \sim -.06$). In accordance with H3, job insecurity was related to contextual performance indirectly through job satisfaction and affective commitment (indirect effect: $\beta = -.16$; bootstrap CI: $-.26 \sim -.11$). As in Study 1, both indirect effects were significant and negative, in line with the view of the hindrance effect. Finally, the direct path from job insecurity to task performance was significant but negative ($\beta = -.25$; $p \le .01$), as well as the direct effect on contextual performance ($\beta = -.15$; $p \le .05$). As a result, H4a and H4b were not corroborated and the challenge reaction to job insecurity was not supported, as in Study 1. The final model, specified in Figure 1 (coefficients in bold), is a partial mediational model and shows an acceptable fit to the data: $\chi^2_{(100)} = 302.04$; NNFI = .90; CFI = .91; RMSEA = .07 with CI = .07 ~ .09; SRMR = .06.

DISCUSSION

The main purpose of this study was to investigate the job insecurity-performance relationship and to provide a theoretical framework that accounts for the underlying coping dynamics. To accomplish this aim we have proposed to draw on a two-dimensional stressor model (LePine et al., 2005), which suggests that stressors can be associated with negative or positive behavioural reactions. Our theoretical model takes into account both potential active and passive reactions to insecurity with associated coping strategies. In particular, we were interested to understand if job insecurity acts only as a hindrance stressor with undesirable strain reactions and withdrawal behaviours or whether there is also a challenge effect that triggers productive behaviours. This is a matter of practical importance in the light of increasingly pervasive job insecurity for workers around the globe, especially because job performance plays a central role in most personnel decisions, such as meritbased compensation and retention.

Theoretical implications

We have proposed that the view of job insecurity as a hindrance or challenge stressor reflects two different coping strategies. The passive and indirect reaction is associated with lower job satisfaction and affective commitment and, through these effects, with reduced work efforts. The proactive and direct response to job insecurity reflects a job preservation strategy resulting in higher performance, for the instrumental aim of obtaining more job security. In particular, this study makes a number of relevant contributions to the job insecurity literature. First, our research responds to the request to provide theoretical explanations on inconsistent findings regarding the job insecurityperformance link, as underlined in the recent reviews on job insecurity (Lee et al., 2018; Shoss, 2017). To accomplish this goal, we have used a procedure to test the balance between two potential and counteracting performance effects, that is, a model in which the mediation of psychological reactions was examined. Specifically, by explaining the impact on performance through the coping process, allows us to understand the stress dynamics underlying the consequences of job insecurity with the aim of guiding effective organisational interventions. Furthermore, we offer an empirical test of our model in two samples. The replication of patterns across different measures and categories of workers adds strength to the validity of our results, by providing convergence of evidence. Consequently, this research makes a preliminary contribution related to the generalizability of job insecurity and its negative behavioural correlates. The idea that job insecurity conforms to a general pattern in different contexts may also help to develop the same HR strategies and organisational practices that aim to counteract its reactions.

In particular, the findings of our model indicated that all direct paths from job insecurity to task and contextual performance were negative, as well as the indirect effects, thus excluding a challenge effect. In this way, our study has refuted the results of some researchers (e.g., Probst et al., 2007; Selenko et al., 2013; Staufenbiel & König, 2010) who proposed a positive link, thus supporting the idea of job preservation strategies. We did not find any evidence to suggest that job insecurity motivates employees to increase performance, even in the sample of the U.S., a country with openness to change and tolerance of uncertainty. A possible explanation for this finding can be found in the assumption that employees experience job insecurity as an environmental stressor that is difficult to overcome (Vander Elst et al., 2016). Consequently, this perception is more likely to lead to maladaptive coping strategies which in turn result in reduced performance. This also means that when employees perceive a threatening stressor such as job insecurity, they use up energy to cope with it, diverting effort away from performing in-role and extra-role job behaviours. In effect, research found that high levels of a hindrance stressor tend to create conditions of information overload, which may lead to a reduction of employees' attention toward work-related behaviours, thus negatively affecting their performance (Gilboa et al., 2008). Moreover, according the conceptualization of job performance as behaviours under an individual employee's control (Harrison et al., 2006), in both samples we found a stronger negative and indirect effects between job insecurity and contextual performance (OCB), which is more discretionary compared to in-role behaviours.

Limitations and future research directions

Notwithstanding the contributions, this study has some shortcomings that should be acknowledge when interpreting the results. First, a cross-sectional design was used, which prevented us from drawing conclusions about causality and mediation in the strict sense. Nevertheless, in presenting our model from job insecurity over work attitudes to performance, we followed the dominant approach in the literature that convincingly has shown these causal links. Theoretical and empirical work within appraisal framework consider psychological and behavioural reactions to emerge out of stressors. Similarly, job insecurity is mainly conceived as a hindrance stressor that interferes with personal growth and task accomplishment, and previous longitudinal studies suggest the causal associations proposed in this paper (De Witte et al., 2015). A second concern is related to self-report nature of our data, which may have increased the risk of common method variance and other response biases such as social desirability. To decrease this risk, several procedural recommendations were adopted, as suggested by Podsakoff and colleagues (2003). For example, counterbalancing the order of the predictor and criterion variables, avoiding the use of bipolar

numerical scale, using scales with reverse-coded items phrased in a positive manner. Furthermore, we chose internationally validated measurements and we examined their construct validity with a series of CFAs to test in particular if common method variance influenced our results. It is however not possible to use other methods than self-reports to capture job insecurity, job satisfaction and affective commitment, as these variables are highly subjective. Instead, a different concern is related to the self-reported measure for task and contextual performance. We tried to decrease social desirability on these measurements by guaranteeing anonymity of the results and stressing that there would be no right or wrong answers. Evidence has also supported the validity of self-reports for these behaviours. In particular, Gilboa and colleagues (2008) showed that the associations between different stressors (including job insecurity) and self-rated performance are very similar to the findings based on supervisory ratings or objective performance data. Also, the study of Singh and colleague (Singh, Darwish, & Potočnik, 2016) reviews the organisational performance measurement literature, emphasizing the advantages of subjective measures. Nevertheless, future studies may benefit from using longitudinal designs and multi-source measurements for performance. It might also prove worthwhile to examine other behaviours that have important strategic implications for organisations, such as counterproductive behaviours, innovative behaviours, and safety performance.

Another area that warrants further attention is to explore the generalizability of our results to other cultures and countries. Since we tested our model with samples from two different countries, it would be interesting to examine whether the job insecurity-performance relationship varies across countries and whether this variation depends on specific country-level characteristics (e.g., labour market policies). However, to verify these assumptions a multilevel approach is needed, as already adopted in few studies on job insecurity (Debus, Probst, König, & Kleinmann, 2012).

Practical implications

Job insecurity is a pervasive organisational realty and worthy of continued study. In particular, from understanding of the underlying processes that lead to its effects, organisations can get suggestions to design strategies and manage stress resulting from job insecurity. Two routes could be followed in developing interventions. Primary interventions are concerned with eliminating or reducing insecurity as such. Given the current development and changes in the labour market, it seems hard to prevent employees from feeling insecure. However, it is possible to reduce employees' exposure to job insecurity through communication on future organisational plans, which is a valuable resource that increases the predictability of the situation and makes it more understandable (Jiang & Probst, 2014). In fact, the uncertainty about the continuance of one's job motivates employees to seek explanations and signals about their work situation. Consequently, individuals who have access to clear and realistic communication not only have more information about their future but they can also gain more resources to cope with the adverse consequences of job insecurity. Active or passive reactions to job insecurity may therefore depend on the availability of communication provided to workers.

Another strategy that managers can adopt is to involve employees in participative decision making because it increases the control over the situation, thereby reducing job insecurity. By sharing organisational decisions with employees, they may enhance the rate of information circulation across the organisation, improve employee work incentives and increase a sense of belonging to an organisation (i.e., commitment) (Piccoli & De Witte, 2015; Piccoli et al., 2017).

A second route to develop organisational interventions is to buffer the negative consequences of job insecurity. Based on the results of our study, the negative effects of job insecurity on performance run through low levels of specific work attitudes. Therefore, policy makers can introduce ways to stimulate employees' satisfaction and affective commitment. For example, actions related to job redesign through the job enrichment technique can improve employees' autonomy over the planning and execution of their own work, with the benefit of increasing job satisfaction. Managers may also consider increasing the amount of contact and dialogue between organisational agents and employees. This aims to create good bonds with the employer and, in turn, it may improve affective commitment and identification with the organisation.

References

- Abramis, D. J. (1994). Relationship of Job Stressors to Job Performance: Linear or an Inverted-U? *Psychological Reports*, *75*, 547-558. doi: 10.2466/pr0.1994.75.1.547
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, *63*, 1-18. doi: 10.1111/j.2044-8325.1990.tb00506.x
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior.Englewood Cliffs, NJ: Prentice-Hall.
- Barling, J., & Cooper, C.L. (2008) The SAGE Handbook of Organizational Behavior: Volume I -Micro Approaches. SAGE Publications Inc. doi: 10.4135/9781849200448.n7
- Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, *35*(5), 307-311.
- Cheng, G. H. L., & Chan, D. K. S. (2008). Who suffers more from job insecurity? A meta-analytic review. *Applied Psychology*, *57*, 272-303. doi: 10.1111/j.1464-0597.2007.00312.x
- Conway, J. M., & Lance, C. E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, 25, 325-334. doi: 10.1007/s10869-010-9181-6
- De Witte, H., Vander Elst, T., & De Cuyper, N. (2015). Job insecurity, health and well-being. In J.
 Vuori, R. Blonk, & R. H. Price (Eds.), *Sustainable Working Lives: Managing Work Transitions and Health Throughout the Life Course* (pp. 109-128). New York: Springer. doi: 10.1007/978-94-017-9798-6
- Debus, M. E., Probst, T. M., König, C. J., & Kleinmann, M. (2012). Catch me if I fall! Enacted uncertainty avoidance and the social safety net as country-level moderators in the job insecurity-job attitudes link. *Journal of Applied Psychology*, *97*, 690-698. doi: 10.1037/a0027832

Edwards, B. D., Franco-Watkins, A. M., Cullen, K. L., Howell, J. W., & Acuff, R. E. (2014).

Unifying the challenge-hindrance and sociocognitive models of stress. *International Journal of Stress Management*, *21*, 162-185. doi: 10.1037/a0034730

- Fischmann, G., De Witte, H., Sulea, C., & Iliescu, D. (2018). Qualitative job insecurity and in-role performance: a bidirectional longitudinal relationship? *European Journal of Work and Organizational Psychology*, 27(5), 603-615. doi: 10.1080/1359432X.2018.1504769
- Francis, L., & Barling, J. (2005). Organizational injustice and psychological strain. *Canadian Journal of Behavioural Science*, 37, 250-261. doi: 10.1037/h0087260
- Gilboa, S., Shirom, A., Fried, Y., & Cooper, C. (2008). A meta-analysis of work demand stressors and job performance: Examining main and moderating effects. *Personnel Psychology*, *61*, 227-271. doi: 10.1111/j.1744-6570.2008.00113.x
- Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? Metaanalytic comparisons of integrative behavioral outcomes and time sequences. Academy of Management Journal, 49, 305-326. doi: 10.5465/AMJ.2006.20786077
- Hoppe, M.H., & Bhagat, R.S. (2007). Leadership in the United States of America: The leader as cultural hero. In J.S. Chhokar, F.C. Brodbeck, and R.J. House (Eds.), *The GLOBE research project: Country anthology* (pp. 475-543). Mahwah, NJ: Erlbaum.
- Huang, G. H., Zhao, H. H., Niu, X. Y., Ashford, S. J., & Lee, C. (2013). Reducing job insecurity and increasing performance ratings: Does impression management matter? *Journal of Applied Psychology*, 98, 852-862. doi: 10.1037/a0033151
- Jiang, L., & Lavaysse, L. M. (2018). Cognitive and Affective Job Insecurity: A Meta-Analysis and a Primary Study. *Journal of Management*, *44*(6), 2307-2342. doi: 10.1177/0149206318773853

Jiang, L., & Probst, T. M. (2014). Organizational communication: A buffer in times of job insecurity? *Economic and Industrial Democracy*, 35, 557-579. doi: 10.1177/0143831X13489356

Judge, T. A., Scott, B. A., & Ilies, R. (2006). Hostility, job attitudes, and workplace deviance: Test of a multilevel model. *Journal of Applied Psychology*, *91(1)*, 126-138. doi: 10.1037/0021-

9010.91.1.126

- Keim, A. C., Landis, R. S., Pierce, C. A., & Earnest, D. R. (2014). Why do employees worry about their jobs? A meta-analytic review of predictors of job insecurity. *Journal of Occupational Health Psychology*, 19(3), 269-290. doi: 10.1037/a0036743
- Lam, C. F., Liang, J., Ashford, S. J., & Lee, C. (2015). Job insecurity and organizational citizenship behavior: Exploring curvilinear and moderated relationships. *Journal of Applied Psychology*, *100*, 499-510. doi: 10.1037/a0038659

Lazarus, R. S., Folkman, S. (1984). Stress, appraisal, and coping. New York, NY: Springer.

- Lee, C., Huang, G.-H., & Ashford, S. J. (2018). Job Insecurity and the Changing Workplace: Recent Developments and the Future Trends in Job Insecurity Research. *Annual Review of Organizational Psychology and Organizational Behavior*, *5*, 335-359. doi: 10.1146/annurevorgpsych-032117-104651
- LePine, J. A., Podsakoff, N. P., & LePine, M. A. (2005). A meta-analytic test of the challenge Stressor-hindrance stressor framework: An explanation for inconsistent relationships among Stressors and performance. *Academy of Management Journal*, 48(5), 764-775. doi: 10.5465/AMJ.2005.18803921
- Loi, R., Ngo, H. Y., Zhang, L., & Lau, V. P. (2011). The interaction between leader-member exchange and perceived job security in predicting employee altruism and work performance. *Journal of Occupational and Organizational Psychology*, *84*, 669-685. doi: 10.1348/096317910X510468

Mäder, I. A., & Niessen, C. (2017). Nonlinear associations between job insecurity and adaptive performance: The mediating role of negative affect and negative work reflection. *Human Performance*, 30(5), 231-253. doi: 10.1080/08959285.2017.1364243

Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, *61*, 20-52. doi: 10.1006/jvbe.2001.1842

- Muthén, L., & Muthén, B. (2012). *Mplus Version 7 user's guide*. Los Angeles, CA: Muthén & Muthén.
- Näswall, K., & De Witte, H. (2003). Who feels insecure in Europe? Predicting job insecurity from background variables. *Economic and Industrial Democracy*, 24, 189-215. doi: 10.1177/0143831X03024002003
- Open Science Collobaration. (2015). Estimating the reproducibility of psychological science: Open Science Collobaration. *Science*. doi: 10.1126/science.aac4716
- Pashler, H., & Wagenmakers, E. J. (2012). Editors' Introduction to the Special Section on
 Replicability in Psychological Science: A Crisis of Confidence? *Perspectives on Psychological Science*, 7, 528-530. doi: 10.1177/1745691612465253
- Piccoli, B., & De Witte, H. (2015). Job insecurity and emotional exhaustion: Testing psychological contract breach versus distributive injustice as indicators of lack of reciprocity. *Work and Stress*, *29*(*3*), 246-263. doi: 10.1080/02678373.2015.1075624
- Piccoli, B., De Witte, H., & Reisel, W. D. (2017). Job insecurity and discretionary behaviours:
 Social exchange perspective versus group value model. *Scandinavian Journal of Psychology*, 58(1), 69-78. doi: 10.1111/sjop.12340
- Podsakoff, N. P., Lepine, J. A., & Lepine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, *92*, 438-454. doi: 10.1037/0021-9010.92.2.438
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common Method
 Biases in Behavioral Research: A Critical Review of the Literature and Recommended
 Remedies. *Journal of Applied Psychology*, 88, 879-903. doi: 10.1037/0021-9010.88.5.879
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1(2), 107-142. doi: 10.1016/1048-

9843(90)90009-7

- Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual- and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 94(1), 122-141. doi: 10.1037/a0013079
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. In *Behavior Research Methods*, 40(30), 879-891. doi: 10.3758/BRM.40.3.879
- Price, J. L. (1997). Handbook of organizational measurement. *International Journal of Manpower*, *18*, 305-558. doi: 10.1108/01437729710182260
- Probst, T. M., Stewart, S. M., Gruys, M. L., & Tierney, B. W. (2007). Productivity, counterproductivity and creativity: The ups and downs of job insecurity. *Journal of Occupational and Organizational Psychology*, 80, 479-497. doi: 10.1348/096317906X159103
- Riketta, M. (2002). Attitudinal organizational commitment and job performance: A meta-analysis. *Journal of Organizational Behavior, 23,* 257-266. doi: 10.1002/job.141
- Schreurs, B. H. J., Hetty van Emmerik, I. J., Günter, H., & Germeys, F. (2012). A weekly diary study on the buffering role of social support in the relationship between job insecurity and employee performance. *Human Resource Management*, *51*, 259-279. doi: 10.1002/hrm.21465
- Selenko, E., Mäkikangas, A., Mauno, S., & Kinnunen, U. (2013). How does job insecurity relate to self-reported job performance? Analysing curvilinear associations in a longitudinal sample. *Journal of Occupational and Organizational Psychology*, 86, 522-542. doi: 10.1111/joop.12020

Shoss, M. K. (2017). Job Insecurity: An Integrative Review and Agenda for Future Research. *Journal of Management*, 43(6), 1911-1939. doi: 10.1177/0149206317691574

Singh, S., Darwish, T. K., & Potočnik, K. (2016). Measuring Organizational Performance: A Case for Subjective Measures. *British Journal of Management*, 27, 214-224. doi: 10.1111/1467-8551.12126

- Staufenbiel, T., & König, C. J. (2010). A model for the effects of job insecurity on performance, turnover intention, and absenteeism. *Journal of Occupational and Organizational Psychology*, 83, 101-117. doi: 10.1348/096317908X401912
- Sverke, M., Hellgren, J., & Näswall, K. (2002). No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology*, 7, 242-264. doi: 10.1037/1076-8998.7.3.242
- Van Dyne, L., Graham, J. W., & Dienesch, R. M. (1994). Organizational citizenship behavior:
 Construct redefinition, measurement, and validation. *Academy of Management Journal*, *37(4)*, 765-802. doi: 10.5465/256600
- Vander Elst, T., De Cuyper, N., Baillien, E., Niesen, W., & De Witte, H. (2016). Perceived Control and Psychological Contract Breach as Explanations of the Relationships between Job Insecurity, Job Strain and Coping Reactions: Towards a Theoretical Integration. *Stress and Health, 32*, 100-116. doi: 10.1002/smi.2584
- Vander Elst, T., De Witte, H., & De Cuyper, N. (2014). The Job Insecurity Scale: A psychometric evaluation across five European countries. *European Journal of Work and Organizational Psychology*, 23(3), 364-380. doi: 10.1080/1359432X.2012.745989
- Williams, L. J., Cote, J. A., & Buckley, M. R. (1989). Lack of Method Variance in Self-Reported
 Affect and Perceptions at Work: Reality or Artifact? *Journal of Applied Psychology*, 74, 462-468. doi: 10.1037/0021-9010.74.3.462

Variable	М	SD	1	2	3	4	5
Study 1 (Italian data)							
1. Job insecurity	2.12	.82	(.81)				
2. Job satisfaction	3.47	.95	49**	(.83)			
3. Affective commitment	3.29	.90	29**	.69**	(.83)		
4. Task performance	3.85	.60	12*	.16**	.24**	(.76)	
5. Contextual performance (OCB)	3.46	.82	11*	.32**	.49**	.27**	(.73)
Study 2 (U.S. data)							
1. Job insecurity	2.18	.79	(.77)				
2. Job satisfaction	3.37	.98	28**	(.81)			
3. Affective commitment	3.07	.97	32**	$.70^{**}$	(.83)		
4. Task performance	3.73	.65	27**	.22**	.15**	(.70)	
5. Contextual performance (OCB)	3.65	.76	27**	.42**	.43**	.34**	(.69)

Table 1. Means, standard deviations, reliabilities (Cronbach's alpha's in parentheses) and correlations (Study 1 and 2).

Notes. Study 1: Italian sample, *N* = 302; Study 2: U.S. sample, *N* = 320. *p < .05; **p < .01; ***p < .001.

Model	χ^2	df	р	NNFI	CFI	RMSEA (99% C.I.)	SRMR	Model comparison	$\Delta \chi^2$
M1 Four-factor model (hypothesised model)	368.413	130	< .001	.913	.924	.062 (.072 ~ .084)	.053		
M2 Three-factor model	578.066	133	< .001	.822	.825	.094 (.096 ~ .114)	.086	2 versus 1	209.653*
M3 One-factor model	1305.631	136	< .001	.536	.524	.156 (.163 ~ .178)	.145	3 versus 1	937.218*
M4 Common factor model	215.004	112	< .001	.933	.941	.054 (.043 ~ .064)	.042	4 versus 1	153.409*

Table 2. Results of the confirmatory factor analyses for all measurement models of Study 1 (N = 302).

Notes. C.I. = confidence interval; *p < .001.

Model	χ^2	df	р	NNFI	CFI	RMSEA (99% C.I.)	SRMR	Model comparison	$\Delta \chi^2$
M1 Four-factor model (hypothesised model)	285.612	99	< .001	.902	.918	.071 (.071 ~ .093)	.061		
M2 Three-factor model	461.342	102	< .001	.801	.832	.091 (.089 ~ .113)	.081	2 versus 1	174.730 [*]
M3 One-factor model	1106.223	105	< .001	.466	.634	.141 (.152 ~ .166)	.123	3 versus 1	820.611*
M4 Common factor model	167.438	83	< .001	. 928	.937	.056 (.044 ~ .069)	.047	4 versus 1	118.174*

Table 3. Results of the confirmatory factor analyses for all measurement models of Study 2 (N = 320).

Notes. C.I. = confidence interval; *p < .001.

Figure 1. Mediational model with standardized path coefficients.Study 1, Italian data: Full mediational model (coefficients in normal font)Study 2, U.S. data: Partial mediational model (coefficients in **bold font**)



Notes. JS = job satisfaction; Com = affective commitment; OCB = organisational citizenship behaviour ${}^{*}p < .05$; ${}^{**}p < .01$; ${}^{***}p < .01$