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Qualitative job insecurity and extra-role behaviours: The moderating role of work motivation and perceived investment in employee development

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Abstract

We examine how qualitative job insecurity, work motivation and perceived investment in employee development (PIED) are associated with employees' contextual performance in terms of extra-role behaviours (ERBs). We propose a three-way interaction model and suggest that the way qualitative job insecurity relates to employees' ERBs is contingent upon their work motivation and PIED. Results showed that there was a significant three-way interaction between job insecurity, PIED and intrinsic motivation (but not for extrinsic motivation) for ERBs. Employees who reported high qualitative job insecurity but had low intrinsic motivation engaged in *more* ERBs when they were given ample opportunities for development, while highly intrinsically motivated individuals exhibited *less* ERBs when the organisation supported their professional development. This study contributes to job insecurity and motivation literature. To increase ERBs, organisations are advised to reduce qualitative job insecurity and to provide ample PIED for employees who have low levels of intrinsic motivation.

Keywords: qualitative job insecurity, intrinsic and extrinsic motivation, employee development, OCB, extra-role behaviours

Data availability statement: Data available upon reasonable request from the authors

Qualitative job insecurity and extra-role behaviours: The moderating role of work motivation and perceived investment in employee development

To date, a considerable body of research has set out to investigate the effects of quantitative job insecurity (i.e., “the perceived powerlessness to maintain desired continuity in a threatened job situation”, Greenhalgh & Rosenblatt, 1984, p. 438) on employee contextual performance-related behaviors including extra-role behaviours (ERBs) (Ashford et al., 1989; Gilboa et al., 2006; Lee et al., 2006; Roll et al., 2015; Sverke et al., 2019). Surprisingly, despite indications (e.g., De Witte et al., 2010; Stynen et al., 2015) that qualitative job insecurity (i.e., “perceptions of potential loss of quality in the employment relationship, such as deterioration of working conditions, demotion, lack of career opportunities, decreasing salary development, and concerns about person–organization fit in the future”; Sverke & Hellgren, 2002, p. 30) might be a stronger predictor of employee performance than quantitative job insecurity, most studies focus on quantitative job insecurity (Vander Elst et al., 2012; Staufenbiel & König, 2010). This leaves the influence of qualitative job insecurity considerably understudied (Sverke et al., 2019). But would the relationship between qualitative job insecurity and ERBs exhibit the same pattern like the quantitative type? Studies so far (Stynen et al., 2013) have provided somewhat mixed results regarding the qualitative job insecurity–employee contextual performance connection, suggesting that potential moderators can condition this relationship.

Furthermore, despite the recently growing number of studies about how qualitative job insecurity relates to various employee outcomes, it is still unclear what type of individuals (in terms of motivational type) may struggle to function when faced with qualitative job insecurity, and thus may be able to embrace the uncertain situation and display valuable ERBs. In a work context, intrinsic motivation refers to an individual internal drive that is

directed towards doing the job because of personal interest and perceived enjoyment from the job itself (Gagné et al., 2015). Extrinsic motivation, on the other hand, is associated with doing a job because of an expectation of reward, such as salary, job promotion or bonus (Ryan & Deci, 2000; Gagné et al., 2015). Research has demonstrated that motivation is a key psychological determinant of employee behavior (e.g., Tremblay et al., 2009; Ryan & Deci, 2000; Gagné et al., 2015; Caniëls et al., 2017) and performance (Cerasoli et al., 2014; Grant, 2008), and that intrinsic and extrinsic motivation are two distinct constructs, often seen as contrasting motivational types which can trigger different cause–effect relationships (Ryan & Deci, 2020; Lee, Reeve, Xue, & Xiong, 2012).

Moreover, given that it is not clear how employee perceptions of the organisational support for their development may influence the job insecurity–ERBs relationship (Xanthopoulou et al., 2007), another relevant moderator incorporated in our study is perceived investment in employee development (PIED). Because individual and organisational contextual factors can co-shape employee behaviours (Fernet et al., 2020; Salanova & Schaufeli, 2008), it seems pertinent to know how motivation and PIED interact with one another and with qualitative job insecurity to shape employees' ERBs. Several studies have already examined the beneficial properties of organisational support on employee work behaviours and engagement (Gillet et al., 2013a, 2013b; Skaalvik & Skaalvik, 2018). Yet, in the situation of qualitative job insecurity, which implies that the job content might change, organisations need to concentrate their efforts on providing development opportunities that enable individuals to build resources and improve their chances of handling a broader job content well (Lee & Bruvold, 2003). Evidence from prior studies shows that organisations that deliberately include employee development in their HR strategy enjoy a more highly committed and motivated workforce (Lee & Bruvold, 2003; MacDuffie, 1995; Ichniowski et al., 1997).

Despite good intentions on the part of the organisation, it is not always evident that the development opportunities an employer provides will be appreciated and well utilized. We expect that PIED trigger employee ERBs by affecting the interaction between qualitative job insecurity and employees' motivational type. High vs. low PIED – in combination with high vs. low employee motivation (both intrinsic and extrinsic) – is expected to determine how qualitative job insecurity relates to ERBs. This study examines the interaction between PIED (an organisational resource; Kuvaas & Dysvik, 2009) and employee motivational type (an individual characteristic), which may offer a more nuanced understanding of the relationship between qualitative job insecurity and employees' ERBs.

The present study goes beyond previous research in several ways. While studies thus far have addressed the relationship between qualitative job insecurity and various work outcomes, more insight is needed about the personal and job factors that condition such associations. Examining the role of work motivation is especially valuable because it can help organisations better understand how employee motivation makes a difference when the job content and working conditions are uncertain. In addition, we advance knowledge on the effects of PIED in connection to motivational types and job insecurity. We explore whether (high vs. low) PIED can have distinct effects for employees with intrinsic and extrinsic motivation when they experience qualitative job insecurity. This knowledge is valuable in helping practitioners better understand how they can help employees who experience qualitative job insecurity, such that they do not become demotivated and reduce their contextual performance such as ERBs.

Qualitative job insecurity and ERBs

Qualitative job insecurity is a job demand or work stressor that can diminish positive employee outcomes and behaviours and enhance negative ones (De Witte et al., 2012; De Witte et al., 2010; Van den Broeck et al., 2014). Several theoretical perspectives have been

proposed to explain the processes through which job insecurity relates to contextual performance, including the transactional model of stress and coping (Lazarus & Folkman, 1984), Psychological Contract Theory (Rousseau, 1995), and social exchange theory (SET; Blau, 1964). One framework that might be particularly well suited for this purpose is SET (Blau, 1964): it proposes that when employees perceive the relationship with their employer to be satisfactory, they will feel socially indebted to the organisation (Blau, 1964) and will attempt to reciprocate by engaging in positive behaviours at work. These positive behaviours can manifest themselves in the form of extra-role behaviours (Borman & Motowidlo, 1993). ERBs pertain to employee behaviors beyond the formal requirements including sharing ideas with co-workers or participating in professional networks to benefit the organisation (Van Dyne et al., 1994). While some contextual performance indicators, such as in-role performance, may be constrained by organisational factors outside the employee's control (Organ 1977), employees can only reciprocate to a limited extent by modifying this kind of in-role performance (Chiaburu & Byrne, 2009). In contrast, employees are considered to have full control over their ERBs and may improve their contribution to the organisation by showing altruism to co-workers and involvement in organisational goals (Eisenberger et al., 2010; Organ et al., 2006). For this reason, and because employees would not easily express their potential discontent towards the organization through decreasing in-role performance, which could jeopardize their employment, we selected ERBs to tap into employee contextual performance.

The majority of the empirical evidence indicates that qualitative job insecurity is a work stressor that undermines employee well-being (Cullen et al., 2014; Kinnunen et al., 1999; Vander Elst et al., 2014). Experiencing uncertainty about one's (future) job characteristics can generate stress and affect employees' positive behaviours towards the organization, including ERBs (Callea & Urbini, 2016; Cullen et al., 2014; Kinnunen et al.,

1999; Vander Elst et al., 2014). Even though the research findings about the relationship between qualitative job insecurity and well-being seem highly congruent, supporting a negative effect, the evidence accumulated over the past two decades on the effect of qualitative job insecurity and indicators of contextual performance such as ERBs is less clear-cut (Stynen et al., 2015).

On the one hand, qualitative job insecurity can erode employees' willingness to engage in positive organizational behaviors such as ERBs because it violates their expectations about the organisation's commitment to them (De Cuyper & De Witte, 2006; Vander Elst et al., 2014). SET (Cropanzano & Mitchell, 2005) and psychological contract literature indicate that an employment relationship traditionally implies (some extent of) stability in the working conditions and content. Therefore, the employment relationship holds an implicit promise from the organisation that the important and valuable aspects of an employee's job will not be altered during their employment (De Cuyper & De Witte, 2006). Employees who perceive that their job, as they know it, may not continue or may continue under different conditions are likely to engage in fewer positive behaviors towards the organization (Reisel et al., 2010) as a means to restore the balance in the exchange relationship with the employer. Also, from a stress and coping perspective, qualitative job insecurity may frustrate these behaviours because it taxes an individual's energy and psychosocial resources (Stynen et al., 2015).

Alternatively, qualitative job insecurity might engender positive behaviors such as ERBs because employees may view such behaviours as an active coping strategy (or behavioural effort; Bolino, 1999) that allows them to deal with the stressor (qualitative job insecurity) and regain control over their job situation (Stynen et al., 2015). Perceptions of control are key when individuals are faced with qualitative job insecurity because control can affect their functioning at work (Vander Elst et al., 2014). Especially because technological

and organisational changes have become part of our working life, employees increasingly realise that their jobs, including the work content and conditions, are unlikely to remain stable. Therefore, precarious work (both in terms of duration and employment conditions) is no longer presumed to be a function of a specific contract type (e.g., temporary employment); for many employees it has become a feature of their job. Ultimately, employees' perceptions of qualitative job insecurity may shift: insecurity may be no longer viewed as a broken promise from the organisation, but as a characteristic inherent to contemporary work. As such, even though qualitative job insecurity might still require personal resources, the negative effects on performance due to breaches in one's expectations from the organisation may be tempered considerably.

As indicated, there is still scarce and scattered empirical evidence for the relationship between qualitative job insecurity and employee contextual performance such as ERBs. Whereas some scholars (e.g., Callea & Urbini, 2016; Chirumbolo & Areni, 2010; Cullen et al., 2014) have established a negative relationship between qualitative job insecurity and employee contextual performance, others have found a positive effect (e.g., Stynen et al., 2015). Although theoretical arguments can be provided for both positive and negative effects, we believe a negative relationship is more likely to emerge. In line with SET (Cropanzano & Mitchell, 2005), because insecurity violates employees' expectations for stability of job content and conditions, we expect that qualitative job insecurity will engender negative evaluations of the relationship with the employer and result in fewer positive behaviors towards the organisation (e.g., no longer being willing to present the organisation in a positive light to others). Similar negative evaluations and subsequent behaviours have been well-documented in quantitative job insecurity research (Sverke et al., 2019). Also, from a SET perspective (Blau, 1964), the extent to which employees engage in positive behaviors towards the organization is likely to decline: reducing one's positive and supportive behaviors towards

the organization (which is the essence of extra-role behaviours) in response to qualitative job insecurity might be an employee's way to restore the balance in the exchange relationship.

Even though, based on the above theoretical and empirical evidence, we assume that job insecurity (both types) and employee contextual performance will be negatively associated, research from the past two decades (e.g., Debus, Unger & König, 2019; De Cuyper, Schreurs, De Witte, & Selenko, 2020; Staufenbiel & König, 2010; Stynen et al., 2015) suggests that this relationship may be highly contingent upon personal and contextual factors. In fact, studies have suggested that whether job insecurity will be appraised as a challenge stressor (i.e., a stressor that holds potential for personal growth and achievement) or a hindrance stressor (i.e., a stressor that endangers the acquisition of valuable personal resources) – and hence lead to positive vs. negative employee reactions – depends on individual and contextual confounders alike (De Cuyper, Schreurs, De Witte, & Selenko, 2020; Staufenbiel & König, 2010; Stynen et al., 2015).

Specifically, in line with the transactional model of stress and coping (Lazarus & Folkman, 1984), demanding situations such as qualitative job insecurity will be seen as challenging when they are viewed as holding the potential to promote personal growth and achievement, i.e., when they are aligned with the individual's goals and motivation and when resources for development are made available, which provide some level of confidence that the developmental needs posed by qualitative job insecurity will be met. Qualitative job insecurity will be seen as hindering, when it is assumed to endanger the acquisition of valuable personal resources, i.e., when it is not aligned with the individual's goals and motivation (e.g., highly intrinsically motivated individuals fearing changes in the content of their highly valued job) or when resources for development are inadequate. This means that the relationship between qualitative job insecurity and ERBs may change from negative to positive under certain circumstances, for instance, when the constellation of motivation and

developmental opportunities are such that they may lead the individual to perceive qualitative job insecurity as a potential opportunity.

The role of work motivation

In order to explain how work motivation interacts with qualitative job insecurity and how their combined effect may affect employee ERBs, we integrate insights from SET (Blau, 1964) with the key propositions derived from literature on work motivation (in particular regarding intrinsic and extrinsic motivational types as two distinct types of motivation; Chemolli & Gagné, 2014; Gagné & Deci, 2005).

Self-Determination Theory (SDT; Deci & Ryan, 1985) – one of the most widely used theories in research on human work motivation – proposes that the work context has the capacity to affect employee outcomes through intrinsic (autonomous) work motivation. This is because work environments that are geared towards satisfying employees' three basic psychological needs (i.e., autonomy, relatedness and competence) can boost employees' intrinsic motivation and aid internalisation of extrinsic motivation, thereby triggering positive work outcomes (Gagné & Deci, 2005). Also, highly intrinsically motivated employees are primarily driven by the *value* of the work itself because they experience their daily tasks as enjoyable and interesting (Deci & Ryan, 1985, 2005; Gagné & Deci, 2005). This implies that compared to individuals who are less strongly driven by the intrinsically motivating aspects of their work, highly intrinsically motivated employees will be more susceptible to disturbances or threats to these (task or content-related) job aspects (i.e., to qualitative job insecurity) and will be more easily disappointed and demotivated when these aspects change or vanish.

In this study, we included intrinsic and extrinsic motivation – two distinct motivational types that are important drivers of human behavior. A body of empirical evidence has shown that motivation differs in kind more than in the extent to which individuals are motivated, indicating that motivational types “should consequently not be described as falling along a

continuum of autonomy” (Chemolli & Gagné, 2014, p.2). The idea that the different motivational types do not lie along the same continuum (of autonomy) is hinted by SDT, which suggests that “progression among the different types of regulation does not happen in a stage-like process” (Chemolli & Gagné, 2014, p.3). In addition to the theoretical rationale offered by scholars, empirical evidence also corroborates the differentiation between distinct kinds of motivation and lends support to the idea that the motivational types are not part of the same continuum. For instance, based on observed patterns of correlations as well as on the established multidimensional solutions for the factor structure of motivational regulations (e.g., Brière et al., 1995; Fernet et al., 2008; Gagné et al., 2010; Guay et al., 2000; Millette & Gagné, 2008), Chemolli and Gagné (2014) concluded that the different types of motivation cannot be described using a continuum.

As proposed in the cognitive theory of stress and coping (Lazarus and Folkman, 1984), individuals may have different appraisals and reactions to the same event depending on whether they view it as a situation that threatens their personal goals and well-being (i.e., hindrance stressors) or not, and on their sense of control over it (Vander Elst et al., 2014). The perception of control (or the lack thereof) over contextual stressors (e.g., qualitative job insecurity) may as such affect individuals’ functioning. Perceptions of diminished control are especially likely to engender feelings of helplessness and cause depressive symptoms (Vander Elst et al., 2014) and to trigger hindrance stress appraisal of the situation. For the highly intrinsically motivated individuals, when important content-related aspects of their work are being threatened (i.e., qualitative job insecurity is viewed as a hindrance stressor), this is likely to negatively affect their contextual performance (i.e., reduce the willingness to engage in ERBs). This implies that the negative relationship between qualitative job insecurity and ERBs is likely to be strengthened more (become more negative) for employees who are highly intrinsically motivated.

Furthermore, also extrinsic motivation can be expected to alter the association between qualitative job insecurity and ERBs because this type of job insecurity poses a threat to the valuable aspects of one's job, including the working conditions and rewards, which are particularly important for these individuals, resulting again in a hindrance appraisal of the qualitative job insecurity situation. Because highly extrinsically motivated individuals engage in behaviours to obtain rewards or avoid punishments as a means to show their worth to the organisation (Gagné et al., 2015), they are naturally more inclined to exhibit positive citizenship behaviors towards the organization by for instance engaging in ERBs. Yet, because such individuals highly value the rewards the organisation provides for their performance (i.e., working conditions including promotion opportunities and other rewards), qualitative job insecurity may threaten the valued conditions and rewards (i.e., there is a misalignment between the situation and the individual's goals and motivation) and hence decrease their ERBs.

Moreover, as noted earlier, qualitative job insecurity can be viewed as a breach of an employee's relational psychological contract with the organisation (De Witte et al., 2015). Qualitative job insecurity pertains to anticipated changes in the working conditions (potentially affecting wage or promotion opportunities) that are highly valued by extrinsically motivated individuals. Therefore, employees may be particularly sensitive to violations of their expectations about performance rewards (i.e., expected rewards afforded by the employer in return for their loyalty (expressed by ERBs); De Cuyper & De Witte, 2006; Vander Elst et al., 2014). A breach in an employee's psychological contract is likely to cause a decrease in their loyalty as means of restoring the balance with the organisation (Cropanzano & Mitchell, 2005; Piccoli & De Witte, 2015; Rousseau, 1995).

Extant empirical contributions (e.g., Shin & Grant, 2013; Stynen et al., 2013) largely support both that qualitative job insecurity is negatively related to contextual performance as

well as the role of (suppressed) motivation in this relationship. Even though prior research (Stynen et al., 2013) has focused on the mediating role of motivation (operationalized as satisfaction of employee basic psychological needs) in the association between qualitative job insecurity and contextual performance (operationalized as citizenship behaviors), this evidence is valuable to our study in showing that qualitative job insecurity as such can have demotivating effect for employees, which unlocks a negative reaction on their side (i.e., decrease in contextual performance). This evidence provides yet another explanation for the mechanisms through which qualitative job insecurity as a stressor may affect ERBs and raises the question of whether and how employees' motivational type might modulate or aggravate the demotivating effect of job insecurity.

Three-way interactions between qualitative job insecurity, work motivation and PIED

Depending on an individual's motivation, the degree to which the organisation provides development opportunities may influence (fuel or exasperate) their sense-making and response to qualitative job insecurity. Arguably, the effect of development opportunities on employee outcomes depends on employees' perceptions and interpretations of them (Dysvik et al., 2014; Sitzmann et al., 2008). This is because employees interpret visible organisational characteristics (prestige or revenue) and inducements (e.g., PIED) as signals of less observable organisational characteristics (e.g., organisational values, culture and climate) and intentions (e.g., to invest in and retain employees) (Connelly et al., 2011).

Here too, the main tenets of the Cognitive Theory of Stress and Coping (Lazarus & Folkman, 1984) provide support for the theorised psychological mechanisms. Because individuals appraise an event in their own unique way (Lazarus & Folkman, 1984), we argue that highly *intrinsically* motivated employees may appraise the development opportunities their organisation offers them as a threat because they may interpret PIED as a signal that the content of their job will indeed change. Since intrinsically motivated employees highly value

the content of their job, change – especially fear of losing the enjoyable aspects of their tasks – is likely to be perceived as a threat.

Moreover, providing highly intrinsically motivated individuals with training and other opportunities to learn (PIED) while the valuable aspects of their jobs are being jeopardised may have a demotivating effect because they may view it as an attempt by the organisation to steer them towards job content they have not chosen. This misalignment between the individual's motivational orientation (i.e., valuing the current job content) and situational factors (job content uncertainty and organizational resources supporting potential change of the job content) is likely further exacerbate the negative association between qualitative job insecurity and ERBs for highly intrinsically motivated employees. Specifically, the negative relationship between qualitative job insecurity and ERBs is likely to become stronger when highly intrinsically motivated employees experience high levels of organisational investments in their development (PIED).

Alternatively, employees who are less driven by the content of their job (low intrinsic motivation) may be less sensitive to qualitative job insecurity and may perceive PIED as something positive (i.e., good alignment between the individual's motivation and the context, including the uncertainty situation and the provided development resources), namely a signal that their organisation values them and wants to invest in their professional development. In these circumstances employees are likely to appraise the uncertainty situation as challenging (rather than threatening) because it holds the potential to facilitate their professional development and to help them achieve their goals. Prior research evidence has provided support for the notion that individual characteristics and contextual factors can shape employee appraisal of job insecurity as either a challenging or a hindering work stressor (Staufenbiel & König, 2010; Stynen et al., 2015). Following from the provided theoretical rationale, employees with low intrinsic motivation are likely to engage more enthusiastically

in ERBs than highly intrinsically driven individuals, because they will have a more positive appraisal of the situation and are likely to interpret the organisational investment in their development as good will and a sign that the organisation cares about them (Nikolova et al., 2016).

***Hypothesis 1:** The relationship between qualitative job insecurity and ERBs depends on the interaction between intrinsic motivation and PIED. Specifically, given high PIED and high intrinsic motivation, the relationship between qualitative job insecurity and ERBs is negative, while it is positive for less strongly intrinsically motivated individuals.*

However, contrary to the highly intrinsically motivated, but similar to the less intrinsically motivated individuals, we expect that *extrinsically* motivated employees will have a more positive interpretation of the organisation's efforts to invest in their development when they experience qualitative job insecurity. Extrinsically motivated employees are largely motivated to carry out their work by the (monetary and fringe) benefits. When such employees are faced with qualitative job insecurity, PIED may be seen as a sign of good intent from the organisation (i.e., a sign that the organisation strives to aid employee adaptation and demonstrates care by helping them sustain their employability). Extrinsically motivated individuals are therefore likely to perceive PIED as functional in aiding their efforts to achieve their personal goals. Alignment between organisational goals and an individual's goals in relation to employee learning and professional development is key for employee satisfaction and organisational success (Rowden, 2002).

In contrast to employees with high levels of intrinsic motivation, individuals who have high extrinsic motivation are likely to perceive PIED as a means to achieve more benefits, i.e., experiencing job insecurity as a challenge appraisal. Because PIED implies a directed effort by the organisation to help employees obtain the specific competences they need to function well and perhaps excel in the future, especially when faced with qualitative job insecurity,

such organisational inducements might be viewed as conducive to upward career development (and associated extrinsic rewards). Together, the interplay of extrinsic motivation and PIED is expected to buffer the negative relationship between qualitative job insecurity and ERBs. We hypothesise:

***Hypothesis 2:** The relationship between qualitative job insecurity and ERBs is dependent on the interaction effect between extrinsic motivation and PIED. Specifically, given high PIED and high extrinsic motivation, the relationship between job insecurity and ERBs becomes more positive, compared to the relationship for the less extrinsically motivated individuals.*

METHOD

Participants and procedure

The data were obtained by means of online questionnaires sent to employees working in the Netherlands. Initially, the questionnaire was sent to approximately 800 employees who worked for a large financial company. One week after the initial invitation, employees received a friendly reminder to take part in the survey. Due to the low response obtained from the financial company (190 employees completed the questionnaire for a response rate of slightly less than 25%), a link to the questionnaire was posted on social media, where working individuals (regardless of sector, industry or other occupational characteristics) were invited to take part in the survey. This yielded an additional 194 responses. After removing a few incomplete responses and responses from persons who did not have a permanent contract, the dataset contained data from 334 employees.

When administering the questionnaire, we added a cover letter that informed participants about the relevance of the study. We emphasised the anonymity and privacy of respondents and ensured them that there were no right or wrong answers. It was possible for respondents to leave the survey at any time. When designing the data collection, we followed the principles of the Helsinki declaration. We also provided contact information for the

research team so they could respond to questions about or responses to the questionnaire.

People who started the questionnaire were required to provide informed consent by specifically selecting the option 'I voluntarily agree to take part in this survey'.

Of the 334 participants, 54% were men. On average, they had been working in their current position for 4.9 years and they were 41 years old ($SD = 11$). The vast majority of them did not occupy a management role (92%) and about 81% held a Bachelor's degree or other higher educational degree.

Measures

Validated multiple-item scales were used to measure each construct. Unless specified otherwise, all variables were measured on five-point Likert scales ranging from (1) strongly disagree to (5) strongly agree. Table 1 presents descriptive statistics, reliability estimates (Cronbach's alphas) and intercorrelations for all study variables. The Cronbach's alpha estimates were all above .70 (see Table 1).

Qualitative job insecurity. We measured qualitative job insecurity with a four-item scale. This scale taps into similar aspects as the items of De Witte and colleagues (2010), which have been used in previous studies (Roll, Siu, & Li, 2015; Van den Broeck et al., 2014). A sample item is 'I feel uncertain about the content of my job in the future'.

Work motivation. We measured intrinsic and extrinsic work motivation using the scale of Gagné et al. (2015). *Intrinsic motivation* was measured with three items (e.g., 'I put effort in my work because the work I do is interesting') and *extrinsic motivation* was measured with four items (e.g., 'I put effort in my work because others will respect me'). After confirmatory factor analysis we removed the item 'I put effort in my work to get others' approval' because its error term correlated with another item of the same scale ('I put effort in my work because others will reward me financially only if I put enough efforts in my job'). Confirmatory factor analysis indicated that intrinsic and extrinsic motivations represented distinct factors.

Specifically, the two-factor model ($\chi^2 = 37.314$; $df = 13$; $RMSEA = .075$; $CFI = .982$; $TLI = .971$; $SRMR = .037$), showed a better fit to the data than the one-factor model ($\chi^2 = 648.880$; $df = 14$; $RMSEA = .368$; $CFI = .513$; $TLI = .296$; $SRMR = .259$).

PIED. Participants' perceptions of how their organisation invested in development were measured with seven items developed by Kuvaas and Dysvik (2009). A sample item is 'My organisation invests heavily in employee development (for instance by way of training, programmes and career development)'.

ERBs. ERBs were measured with eight items from the scale of Eisenberger et al. (2010). An example item for ERBs is 'I continue to look for new ways to improve the effectiveness of my work'.

Control variables. Age (in years), gender (0=female and 1=male), education level (1=no completed elementary education; 2=elementary education; 3=high school level; 4=community college; 5=Bachelor's degree; 6=Master's degree; 7=Ph.D), function (management or not), tenure in the current function and actual weekly hours of work (in hours) were added as covariates to control for alternative explanations. We included these variables because other studies indicate the importance of controlling for demographics when studying job demands, job resources, work motivation and ERBs (Bakker et al., 2005; Bakker et al., 2007). Because of potential differences between the two respondent groups, we added a control variable that captures this difference (coded 1 for the financial company sample and 2 for the social media sample). We also controlled for quantitative job insecurity because we strove to obtain a clearer picture of the effect of qualitative job insecurity on ERBs.

Quantitative job insecurity was measured with the three items from De Witte (2000) and validated by items from Vander Elst et al. (2014). A sample item is 'I feel unsure about the future of my job'. Confirmatory factor analysis results showed that qualitative and quantitative job insecurity represented separate variables. The two-factor model ($\chi^2 = 79.914$;

df = 18; RMSEA = .095; CFI = .958; TLI = .935; SRMR = .048) which allowed two error terms to correlate within the quantitative job insecurity measure, showed a better fit with the data than the one factor model ($\chi^2 = 173.170$; df = 20; RMSEA = .142; CFI = .896; TLI = .854; SRMR = .060).

This study uses a model with four core factors (qualitative job insecurity, intrinsic work motivation, extrinsic work motivation and PIED). The goodness of fit of the four-factor model ($\chi^2 = 337.509$; df = 129; RMSEA = .070; CFI = .940; TLI = .929; SRMR = .062) was superior to the one-factor model ($\chi^2 = 1854.107$; df = 135; RMSEA = .195; CFI = .504; TLI = .438; SRMR = .169).

Analyses

We performed two regression analyses to test the hypothesised three-way interactions between qualitative job insecurity, motivation, and PIED on ERBs. The first model specification pertains to intrinsic motivation, while the second model specification pertains to extrinsic motivation. We used the R package Lavaan (Rosseel, 2012), which facilitates bootstrapping. Bootstrapping is a robust method using a nonparametric resampling procedure that involves repeated sampling based on the available data; indirect effects are estimated in each resampled data set. We calculated the variance inflation factors (VIFs) to check for multicollinearity in our dataset. All values were below 5 (the highest VIF was 1.94). Moreover, all correlations were below the threshold of 0.70 (Tabachnick and Fidell 2001), indicating that the likelihood of multicollinearity was low. Table 1 indicates that – except for quantitative job insecurity – the control variables did not structurally associate with any of the core variables in our model (all correlations were below .30). Following recommendations of Bernerth and Aguinis (2016) as well as Becker (2005) about parsimonious use of control variables, we excluded these control variables from further analysis, thereby improving our degrees of freedom. Following conventional procedures (Aiken et al., 1991), measures were

centred prior to constructing interaction terms. Simple slopes tests were conducted for the significant two- and three-way interactions. We plotted all the significant relationships using the R package sjPlot (Gelman, 2008). Following the procedure suggested by Aiken et al. (1991) we tested the simple slopes for low (one standard deviation below the mean), moderate (mean) and high (one standard deviation above the mean) levels of the moderators.

Insert Table 1 about here

RESULTS

Table 2 presents the results of the multiple regression analyses conducted to test the hypothesized relationships. In the first analysis, we included qualitative job insecurity as a predictor, *intrinsic* motivation as a first-stage moderator, PIED as a second-stage moderator and *ERBs* as an outcome ($F(12, 321) = 29.61, p < .001, R_{adj}^2 = .51$). Results showed a significant three-way moderation effect ($b = -.09, CI = [-.16;-.01]$).

In addition, we explored the conditional effects of the focal predictor at different values of the moderator and established that the slopes were significant for the combination of a high value of PIED and high ($b = -.14, se = .05$) and low ($b = .18, se = .07$) value of intrinsic motivation. Figure 2 presents our results. Slope difference tests (Dawson & Richter, 2006) indicated significant differences between the slopes of high intrinsic motivation–high PIED vs. low intrinsic motivation–high PIED ($p = .000$; *Bonferroni-corrected* $p = .000$). In Figure 2 this can be seen by comparing the green downward sloping line (high intrinsic motivation) to the red upward sloping line (low intrinsic motivation) in the right panel (high PIED). This finding supports Hypothesis 1. Note that there were also differences (but less prominent) between the slopes of high intrinsic motivation–low PIED vs. low intrinsic motivation–low PIED, ($p = .091$; *Bonferroni-corrected* $p = 0.549$). In Figure 2 this can be seen by comparing

the green downward sloping line (high intrinsic motivation) to the red upward sloping line (low intrinsic motivation) in the middle panel (low PIED).

Insert Table 2 & Figure 2 about here

In the second model, we included qualitative job insecurity as a predictor, *extrinsic* motivation as a first-stage moderator, and PIED as a second moderator in predicting *ERBs* ($F(12, 321) = 29.61, p < .001, R_{adj}^2 = .32$). Contrary to expectations, the results showed no significant three-way moderation effect ($b = .01, CI = [-.10;.12]$). Hence, Hypothesis 2 was not supported.

DISCUSSION

The main goal of this study was to examine if and how (intrinsic and extrinsic) motivation and perceived investment in employee development (PIED) moderate the relationship between qualitative job insecurity and employee extra-role behaviours (ERBs). Results largely confirmed the hypothesised three-way interaction effect when intrinsic motivation was included in the interaction term, but not when extrinsic motivation was tested. Below, we briefly sum up the study results. Subsequently, we discuss our findings for the three-way interaction involving intrinsic motivation (Hypothesis 1), followed by a discussion of the results for the interaction including extrinsic motivation (Hypothesis 2). We start by explaining the results of the three-way interaction concerning employees with high intrinsic motivation across the different (high, moderate, and low) conditions of PIED, and elaborate on our results regarding the individuals with low intrinsic motivation. After this we reflect on our null findings (rejected Hypothesis 2) regarding the three-way interaction between qualitative job insecurity, extrinsic motivation and PIED.

In brief, we established that individuals who experienced qualitative job insecurity, who had high levels of intrinsic motivation and were provided with ample development opportunities (high levels of PIED), engaged in fewer ERBs, supporting the expected negative association (see downward sloping line in Figure 2, high PIED condition). However, employees who were less intrinsically motivated did engage in more ERBs (see upward sloping line in Figure 2, high PIED condition) when ample development opportunities were made available to them. For the moderate and low PIED condition, the trend (regarding high as opposed to low intrinsic motivation) was similar, but the differences in the effects became less conspicuous; moreover, among individuals experiencing qualitative job insecurity, under the low PIED condition the slope for low intrinsic motivation was no longer significantly different from zero nor significantly different from the slope for the high intrinsic motivation condition. Furthermore, the three-way interaction with extrinsic motivation was not significant.

First, we discuss our findings with regard to Hypothesis 1, which posed that individuals experiencing qualitative job insecurity who have *high intrinsic motivation* and are provided with ample development opportunities (high levels of PIED) engage in less ERBs. Our findings lend support to our reasoning that when the valuable aspects of one's job are threatened (high qualitative job insecurity), the job content (intrinsically motivating tasks) is of high importance, and the organisation provides high levels of PIED, this might be seen as a disappointing development by the highly intrinsically motivated individuals, i.e., a confirmation of the concern that the work content that they value will change. Presumably, in these circumstances, highly intrinsically motivated individuals will be less willing to contribute to the organisation and, as a response, will reduce their ERBs. This finding largely aligns with the theoretical rationale of Social Exchange Theory (SET; Blau, 1964) and emphasizes the importance and complexity of the exchange dynamics between employees and

the organisation. Given that no prior study has looked into the combined effect of qualitative job insecurity, motivation and PIED on ERBs, our finding adds to existing research on individual factors as moderators between job insecurity and employee performance (Chirumbolo & Areni, 2010; Stynen et al., 2015). In line with these earlier studies, we showed that the negative relationship between job insecurity and performance is contingent upon individual differences.

Also, for the individuals with *low levels of intrinsic motivation* the results corroborate our theoretical rationale grounded in SET (Blau, 1964). The fact that employees who experienced qualitative job insecurity and had *lower levels of intrinsic motivation* were more likely to engage in more ERBs when ample development opportunities were made available to them, underscores individuals' inclination to respond positively when they feel valued by the organisation and when this perception is not disrupted by strong attachment to the job content (i.e., high intrinsic motivation). When the content and conditions of employees' job might change (i.e., qualitative job insecurity is present), individuals with low levels of intrinsic motivation may view PIED as an effort on the part of the organisation to increase their employability, and as a signal that the organisation values them and considers them an asset worth investing in (Nikolova et al., 2016).

Yet, this trend only held for the low intrinsically motivated employees under the high and the moderate PIED condition. For the low PIED condition, the slope was not significant, indicating that when qualitative job insecurity is present, if the organisation does not provide developmental opportunities, the low intrinsically motivated employees will not feel the need to reciprocate the positive inducement that PIED represents. In fact, these individuals might to some extent feel let down by the organisation that has failed to meet their needs for professional development and for sustainable employability.

Second, in Hypothesis 2 we suggested that given high PIED and high extrinsic motivation, the relationship between qualitative job insecurity and ERBs will become more positive compared to the relationship for the less extrinsically motivated individuals . However, the results did not support the hypothesis. The three-way interaction was not significant, and neither were the associations between each of the three predictors (qualitative job insecurity, PIED and extrinsic motivation) and ERBs. In the theory development section, we reasoned that highly extrinsically motivated individuals – who are mostly driven by the potential of their work to provide status, material benefits and opportunities for promotion – may view PIED as an opportunity to deal with the uncertain situation (imposed by qualitative job insecurity) and therefore might see such situation as aligned with their motivational goals (e.g., career advancement and material benefits) (Gagné et al., 2015; Rowden, 2002). In addition, highly extrinsically motivated employees might be more willing to contribute to the organisation (through their ERBs) because they experience PIED as an organisational inducement aimed at supporting their career and signalling that they are valuable to their employer (Connelly et al., 2011; Nikolova et al., 2016).

The fact that none of the study predictors or interaction effects (i.e., qualitative job insecurity with extrinsic motivation, PIED with extrinsic motivation, or the three-way interaction) were significant indicates that neither the extrinsic motivational type as such, nor qualitative job insecurity or PIED as contextual factors were associated with employees' ERBs in our data. Although not engaging in ERBs poses no danger to one's formally evaluated performance and might be seen as a possible outlet for employees (dis)satisfaction, actively engaging in ERBs implies a deliberate effort from employees to reciprocate the positive organisational inducement. However, it is possible that extrinsically motivated employees do not feel motivated to do so under the conditions of qualitative job insecurity. They might engage in ERBs (i.e., actively praising and supporting their organisation beyond

the expected performance) only if they feel sufficiently motivated to do so by the positive inducement of their employer (Stynen et al., 2015), which might not be the case if they perceive that qualitative job insecurity is on the rise. If qualitative job insecurity is not viewed as something that deliberately targets employees' rewards, they might not see a reason to engage in less ERBs either, explaining our null finding.

It is also possible that employees in our sample were faced primarily with a threat to the intrinsically motivating aspects of their jobs (e.g., the work tasks they found motivating), and to a lesser extent with a threat to the extrinsically motivating aspects of the work (i.e., opportunities for promotion and financial benefits). Under these circumstances, the extrinsically motivated employees might have been less susceptible to qualitative job insecurity. In addition, given that finding a job with better material benefits might be easier to accomplish (compared to finding another job with the same content) because it involves a search across a broader part of the labour market (i.e., jobs outside of the organisation and outside the current function), extrinsically motivated employees who are not satisfied with their benefits, might be quicker in leaving their job and seeking employment in a different function and elsewhere.

This study advances theory and practice in several important ways. First, it adds to knowledge about the outcomes of qualitative job insecurity. The limited evidence typically focused on its effect on employee job attitudes and well-being (Hellgren et al., 1999; Staufenbiel & König, 2010; Sverke et al., 2019; Van den Broeck et al., 2014). Much less research attention has been directed towards employee work behaviours. Also, our study sheds light on the conditions that may influence the association between experiences of uncertainty about the quality of the employment and employees' exchange relationship with the organisation (e.g., ERBs), whereby we respond to numerous calls for further investigation of potential moderators between job insecurity and its outcomes (Sverke et al., 2019). This

way we also complement prior research that has focused on the mediation mechanism of basic need satisfaction, as a form of motivation, in the relationship between qualitative job insecurity and employee performance-related indicators (Stynen et al., 2013; Van den Broeck et al., 2014). Recent contributions (Long et al., 2021; Roczniowska & Richter, 2021) demonstrate the increasing interest in the relationship between qualitative job insecurity and employee motivation or similar concepts; yet, thus far, motivation has been mostly studied as an outcome of qualitative job insecurity. Adding to the still limited evidence on employee motivation as a moderator, our findings indicate that employee motivational type is a meaningful boundary condition that co-shapes the effect of qualitative job insecurity on ERBs.

We contribute to theory development by linking two seminal theories (SET and SDT; Blau, 1964; Deci & Ryan, 1985) and we aid practitioners in better understanding employees' work motivation that co-shapes their interpretations and evaluations of the work context (i.e., of qualitative job insecurity and PIED). Such knowledge is crucial, given that managers are expected to guide and motivate employees not only to perform their daily work to high standards but also to go 'above and beyond the call of duty' (i.e., ERBs), often while employees are dealing with demanding working conditions such as qualitative job insecurity. By studying the interaction between qualitative job insecurity, employee motivational type, and PIED as determinants of employee ERBs, we add to prior work on motivation at work and employee positive work behaviours (Shin et al., 2019). While a considerable body of research, by employing different methodological approaches (Cerasoli et al., 2014; Nurlina & Jumady, 2021), has provided solid evidence on how motivation relates to performance, and how incentives affect motivation, we add to the scarce knowledge on motivation as a boundary condition in the qualitative job insecurity–ERBs link.

Compared to prior empirical work in which organisational investment in employee development has generally been assumed to enhance employee performance, this study takes us one step forward by offering a more nuanced understanding of the interaction effect PIED and motivation may have for employee ERBs, an issue that has not been thoroughly investigated before. We conclude that in contrast to low intrinsic motivation, highly intrinsically motivated individuals who experience qualitative job insecurity will generally respond with a decrease in ERBs when they are provided high PIED.

Limitations and directions for future research

There are limitations to the current study. First, the data was collected by means of self-reported measures, which may raise concerns about common method bias and measurement error. Self-report-based research can result in inflated estimation of the study effects (Frese & Zapf, 1999). In response to this concern, Spector (2006) asserted that common method bias issues are often overstated in self-report-based studies. Moreover, common method variance cannot affect interaction effects (i.e., independent variables interacting with themselves; Evans, 1985) because they are suppressed in regression analyses, causing such effects to remain under-detected (McClelland & Judd, 1993). Also, scholars have argued that self-reports are particularly suitable for studying individuals' *perceptions* of job characteristics, motivation and affective states (Conway & Lance, 2010) because these experiences are subjective by nature and hence best evaluated by the individual. Nevertheless, future studies might wish to tap into employees' ERBs by surveying external parties (e.g., colleagues or managers).

Second, despite referring to 'effects' of the predictor and the two moderators on employee ERBs, our study's cross-sectional nature prevents us from testing causality. Theoretically, it is possible that stronger performers who are loyal to their organisation (high on ERBs) will be less insecure and will, to a greater extent, trust the ability and goodwill of

their employer to protect them from unfavourable changes in their employment conditions and provide them with adequate development opportunities. They might therefore view their environment as more stable (i.e., less qualitative job insecurity) and their employer as more nurturing with regard to their development needs. Future studies may want to adopt longitudinal research designs to check for the direction of causality.

Third, we measured qualitative job insecurity with a short scale that indiscriminately taps into perceived uncertainty with regard to the quality of employment conditions (i.e., the extrinsically motivating aspects of the job) and job content (i.e., the intrinsically motivating aspects of the job). This prevented us from exploring employee performance as a result of 1) the combined effect of intrinsic motivation with the ‘intrinsic’ aspects of qualitative job insecurity and PIED and 2) the extrinsic motivation with the ‘extrinsic’ aspects of qualitative job insecurity and PIED. Incorporating a more elaborate measure of the qualitative job insecurity construct would allow a more thorough examination of employees’ appraisal of and reaction to (the different aspects of) the different facets of this stressor and would enable more specific conclusions about the capacity of qualitative job insecurity to affect employees’ job and job performance.

Fourth, when discussing PIED as a moderator, it is important to note that we lack information on the specific trainings and developmental opportunities provided to employees in our sample. For instance, we do not know if these trainings and opportunities have been aligned with the anticipated changes (the job insecurity) and with the potential expertise lapses these changes might create. Admittedly, we are unaware of the extent to which the provided trainings have been tailored to meet individual developmental needs, and the extent to which the trainings’ offer is a result of a thorough evaluation of the gap between employees’ current and desirable knowledge and skills levels in different areas. This might also partially explain the lack of significant findings regarding the extrinsically motivated

employees. Prior research has demonstrated the importance of perceived usefulness of trainings for employee satisfaction with the training (Giangreco et al., 2009). If the developmental opportunities provided to these employees are not well aligned with their needs and goals (e.g., offering a training which will not help them to accomplish valuable goals such as status or salary increase), PIED is unlikely to cause significant effects. Future studies are encouraged to use indicators for measuring employee development that more clearly tap into the kind of trainings offered, as well as the perceived usefulness and match of the trainings with employees' needs.

Finally, one needs to consider that modern societies are moving towards more flexible labour markets (characterised by a high occurrence of part-time and temporary contractual arrangements), and precarious workers may be more constrained in realizing their career aspirations because they are given fewer development opportunities (Billett, 1999; Tam, 1997). Hence, future studies may wish to explore how qualitative job insecurity, work motivation and PIED affect the professional development and performance of temporary workers. It is possible that contingent workers will be less concerned with qualitative job insecurity because they will not experience a breach in expectations about stable employment conditions and hence will be less likely to respond by reducing ERBs when faced with an uncertain future.

Implications for practice

Job insecurity, both the qualitative and quantitative type, can enhance negative and reduce positive employee and organizational outcomes (Sverke et al., 2019). Yet, in the past, arguments have been made that job insecurity does not uniformly affect all employees, and characteristics related to personality and motivation may matter in how individuals perceive and deal with qualitative job insecurity (Chirumbolo & Areni, 2010). Our findings support this notion and point at employees' individual motivation as being key to how they respond to

the organization in terms of ERBs. Managers are advised to consider their employees' type and degree of motivation, and the extent to which they provide PIED to help them anticipate the individual responses their employees may have to qualitative job insecurity. Our findings indicate that providing opportunities for development (PIED) seems to be particularly important for employees with low intrinsic motivation. If not sufficiently afforded (i.e., if low levels of PIED), low intrinsically motivated employees might no longer engage in ERBs, potentially because they miss what PIED signals – that they are worth investing in. This finding highlights how valuable PIED is for those who might not be particularly driven by the content aspects of their job, when qualitative job insecurity is at play.

It may be important for organisations who want to help their workforce maintain high ERBs to better understand the differences that employees' motivation might make in how they experience and react to qualitative job insecurity. Prior contributions have hinted that in order to manage qualitative job insecurity as a way to maintain employee motivation and prevent negative outcomes, clear and regular communication, informing employees of potential upcoming changes in their employment conditions is key (Li, 2019). Having open conversations with employees and providing guidance on how they can handle anticipated changes might help to reduce anxieties and create a sense of empowerment. In addition, managers may wish to involve employees – especially the highly intrinsically motivated ones – in decision-making regarding changes to their jobs as a way to reduce potential negative outcomes (Urbanaviciute et al., 2021).

Conclusions

This study provided evidence about the importance of the association between qualitative job insecurity and ERB, and how motivation and PIED may affect this association. Our findings partially support our hypotheses that employees' motivational type in combination with PIED can serve as a boundary condition that shapes their reactions to

qualitative job insecurity. Because concerns about employment conditions and job content are becoming ubiquitous in today's turbulent economic environment, empirical evidence about individual and work characteristics that can shape employees' contextual performance such as ERBs might be very useful for organisations. By considering individuals' work motivation and development opportunities, we have extended knowledge on the mechanisms through which qualitative job insecurity may affect ERBs. Since qualitative job insecurity has become a nearly inevitable part of working life and employee performance is key for the survival and success of every organisation, the implications of the knowledge accumulated in this study will be useful to both future research and practice.

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Table 1. *Reliability estimates (Cronbach's alpha), means, standard deviations, and correlations among the study variables.*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. ERBs	3.95	0.58	(.89)											
2. QLJIC	3.48	0.87	.03	(.82)										
3. IntMot	4.04	0.78	.64**	-.02	(.91)									
4. ExtMot	3.01	0.99	.29**	.35**	.23**	(.86)								
5. PIED	3.83	0.75	.48**	.07	.48**	.41**	(.90)							
6. QNJIC	3.27	0.81	.04	.65**	-.07	.16**	.07	(.72)						
7. Gender	1.54	0.50	-.02	-.09	.02	-.01	-.12*	-.13*						
8. Age	41.29	10.75	-.06	-.17**	.05	-.18**	-.10	.03	.07					
9. Education level	4.81	1.18	.07	-.21**	-.01	-.20**	-.19**	-.15**	.10	-.09				
10. Job Tenure	4.97	5.30	-.17**	.02	-.05	-.04	-.01	.02	.02	.42**	-.15**			
11. Supervisor	1.92	0.27	-.19**	.09	-.11*	.09	-.03	-.00	-.09	-.11*	-.19**	.10		
12. Work hours	37.67	6.38	.16**	-.07	.11*	.04	.01	-.11*	.26**	-.14*	.11	-.18**	-.18**	
13. Sample	1.47	0.50	.03	-.20**	-.03	-.24**	-.23**	-.25**	-.04	.08	.32**	-.12*	-.02	-.08

Note. * $p < .05$, ** $p < .01$; $n = 334$; Cronbach alpha between brackets on the diagonal. Intrinsic and extrinsic motivation are denoted by IntMot and ExtMot, quantitative and qualitative job insecurity by QNJIC and QLJIC, Extra-role behaviours by ERBs, Perceived investment in employee development by PIED, sample (financial company = 1, social media = 2), supervisor (yes = 1; no = 2), gender (female = 1, male = 2).

Table 2: Results of multiple regression analyses predicting extra-role behaviours (ERBs).

	Model using Intrinsic Motivation	Model using Extrinsic Motivation
Constant	4.79** (.57;9.02)	2.42 (-1.94;6.79)
QNJIC	.07* (-.01;.14)	.02 (-.07;.11)
QLJIC	-.81 (-1.90;.28)	-.35 (-1.53;.84)
PIED	-1.26** (-2.36;-.15)	.48 (-.58;1.54)
IntMot	-.38 (-1.49;.73)	
ExtMot		.51 (-1.18;2.19)
QLJIC x PIED	.37** (.08;.66)	.04 (-.24;.33)
QLJIC x IntMot	.18 (-.11;.47)	
PIED x IntMot	.34** (.06;.62)	
QLJIC x PIED x IntMot	-.09** (-.16;-.01)	
QLJIC x ExtMot		.01 (-.44;.46)
PIED x ExtMot		-.16 (-.56;.24)
QLJIC x PIED x ExtMot		.01 (-.10;.12)
R ²	.53	.35
Adjusted R ²	.51	.32
F Statistic (df = 12; 321)	29.61***	14.06***

Note: *p<0.1; **p<0.05; ***p<0.01; n=334; 95% confidence intervals between brackets; Intrinsic and extrinsic motivation are denoted by IntMot and ExtMot, quantitative and qualitative job insecurity by QNJIC and QLJIC, Extra-role behaviours by ERBs, Perceived investment in employee development by PIED

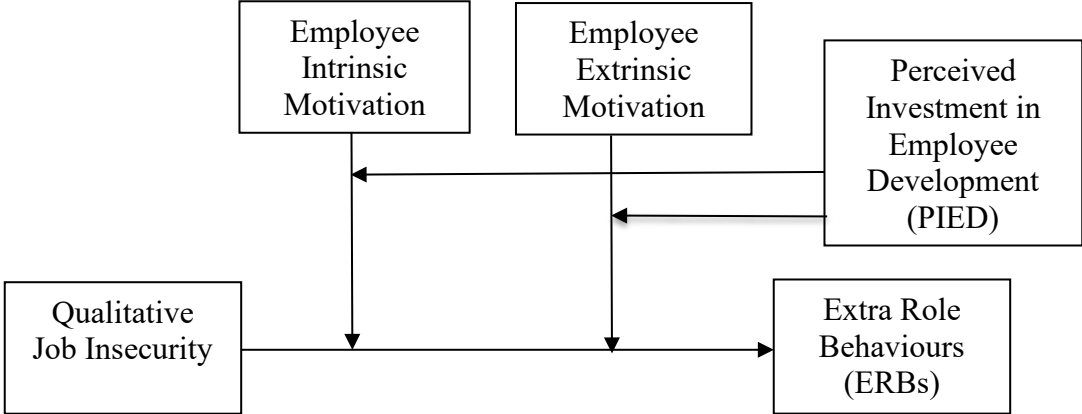


Figure 1. *Conceptual model*

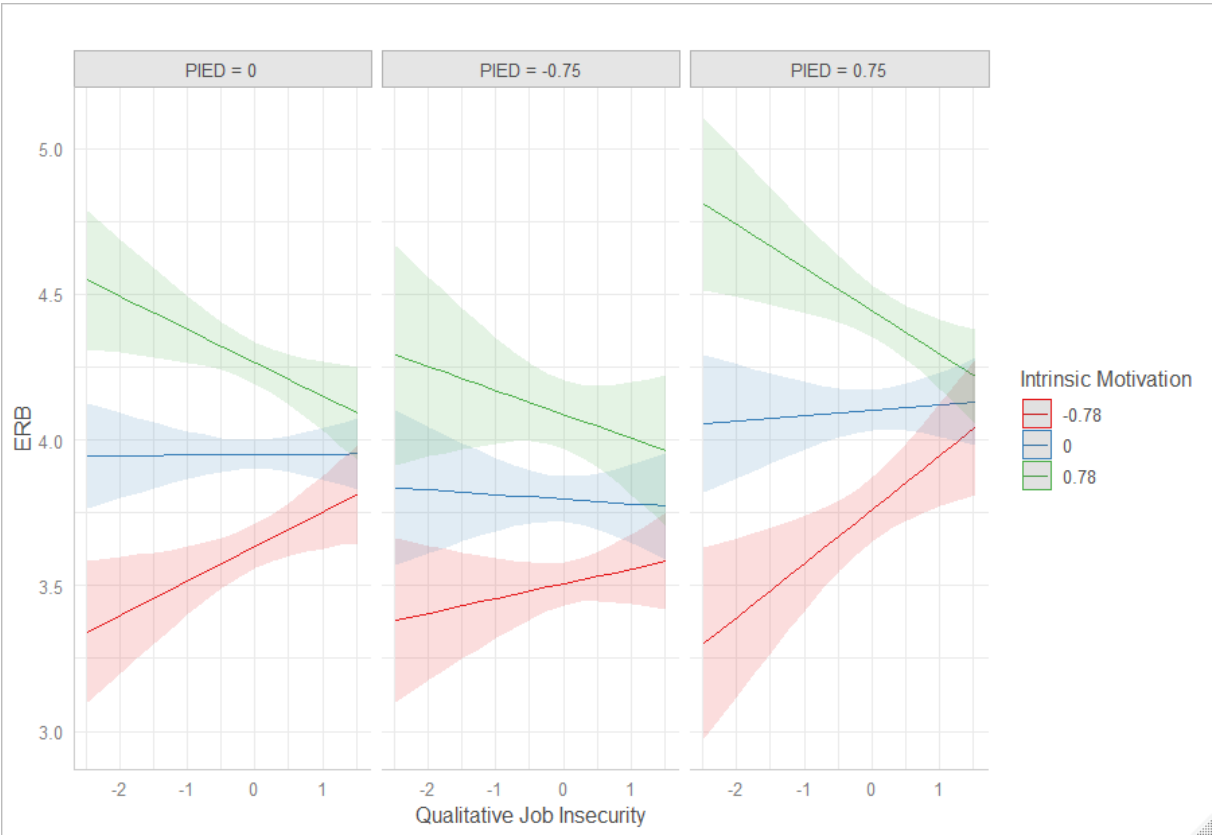


Figure 2. ERBs predicted by qualitative job insecurity, with intrinsic motivation as a first-stage moderator and PIED as a second-stage moderator. From left to right, the panels show mean PIED, low PIED and high PIED.