# Affective mechanisms linking role ambiguity to employee turnover

Role ambiguity to emplovee turnover

1

Received 3 August 2023 Revised 7 December 2023

18 January 2024

22 January 2024 Accepted 22 January 2024

# Ana Iunca Silva

Business Research Unit. ISCT E-Instituto Universitario de Lisboa. Lisbon. Portugal and Polytechnic Institute of Tomar. CeBER Tomar, Portugal, and

> Rosa Rodrigues Instituto Superior de Gestão, Lisboa, Portugal

#### Abstract

Purpose - This study relied on the job demands and resource model to understand employees' turnover intentions. Recent studies have consistently lent support for the significant association between role ambiguity and turnover intentions; however, only a handful of studies focused on examining the potential mediators in this association. The authors argued that role ambiguity positively influences turnover intentions through affective mechanisms: job involvement and satisfaction.

**Design/methodology/approach** – To test the model, a large sample of working adults participated (N = 505).

Findings - Structural equation modeling results showed that role ambiguity, job involvement and job satisfaction were significantly associated with turnover intentions. Moreover, a serial mediation was found among the variables: employees with low levels of role ambiguity tended to report higher job involvement, which further increased their satisfaction with the job and subsequently decreased their turnover intentions.

**Research limitations/implications** – The cross-sectional design is a limitation.

Practical implications - Practical suggestions regarding how organizations can reduce employee turnover are discussed.

Originality/value - The findings provide support for theory-driven interventions to address developing the intention to stay at work among working adults.

**Keywords** Role ambiguity, Job involvement, Job satisfaction, Turnover intentions

Paper type Research paper

© Ana Junça Silva and Rosa Rodrigues. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and noncommercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licences/by/4.0/legalcode

*Conflicts of interest:* The authors declare that they have no conflicts of interest.

Compliance of ethical standard statement: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed consent: Informed consent was obtained from all individual participants involved in the

Data availability: The data is available only upon reasonable request to the authors.

Funding: This work was supported by Fundação para a Ciência e a Tecnologia, grant UIDB/00315/2020. Ana Junca Silva is no longer affiliated with Polytechnic Institute of Tomar, CeBER Tomar, Portugal.



International Journal of Organizational Analysis Vol. 32 No. 11, 2024 Emerald Publishing Limited DOI 10.1108/IJOA-08-2023-3891

#### Introduction

Turnover rates are a major concern for organizations as they mean that something is not working and lead them to invest human and financial resources to recruit and train new employees (De Clercq and Belausteguigoitia, 2017; Dodanwala *et al.*, 2023). Turnover intentions are related to negative perceptions about the organization and often make employees wish to leave it (Firth and Britton, 1989). It is defined as an individual's awareness of leaving an organization shortly (Mowday *et al.*, 2013). The lack of clear information about the roles in the organization – role ambiguity (Chen *et al.*, 2011) – is one of the different job conditions identified as predictors of turnover intentions (Saberi *et al.*, 2023). This ambiguity triggers uncertainty about how to perform the tasks which in turn makes employees experience negative emotions, such as frustration (Schmidt *et al.*, 2014). These emotions are a source of information about the need to change, that is, the intention to leave the organization (Dodanwala *et al.*, 2023; Slåtten *et al.*, 2011). Hence, higher exposure to role ambiguity may predict employees' intention to quit (Dodanwala *et al.*, 2021; Tijani *et al.*, 2021).

The job demands-resources (JD-R) model (Bakker and Demerouti, 2007; Demerouti *et al.*, 2001) explains the relationship between role ambiguity and turnover intentions. Accordingly, role ambiguity is a job demand that accounts for the energetic process explaining turnover (Collie, 2023). That is, in the energetic process, job demands (i.e. role ambiguity) negatively influence employees' mental and physical energy and, as a result, contribute to distress and turnover intentions (Bakker and Demerouti, 2007; Carlson *et al.*, 2017). We also argue that job demands impair the motivational process as they decrease work motivation, work engagement (Schaufeli and Bakker, 2004; Hakanen *et al.*, 2006) and other affective constructs such as job involvement (the degree of employee's involvement with their job; Robbins and Judge, 2013) and job satisfaction – the evaluation about the job as a whole (Warr *et al.*, 2014).

Even though some studies have shown the role of role ambiguity in predicting turnover intentions, only a few explored its affective mechanisms (De Clercq and Belausteguigoitia, 2017). Hence, aiming to develop a greater comprehension of how turnover intentions are created, this study relied on the JD-R to test a serial mediation model between role ambiguity and turnover intentions via job involvement and job satisfaction.

The results contribute to the JD-R model by further explaining the roles of motivational mechanisms in employee attitudes. In sum, we contribute to extant research by explaining how the two affective mechanisms of job involvement, and job satisfaction might diminish employees' desire to leave the organization when they face increasing role ambiguity. Together, these two affective mechanisms represent a comprehensive set of factors that offset the uncertainty that comes with information deficiencies in definitions of job responsibilities (Kahn *et al.*, 1964; Showail *et al.*, 2013). However, more importantly, the findings could help organizations promote employee involvement and satisfaction while preventing turnover.

Furthermore, in a practical vein, demonstrating that both job involvement and job satisfaction minimize the negative effects of role ambiguity on turnover intentions may provide empirical evidence that supports strategies based on empirical evidence. Hence, organizations can use the findings to delineate strategies that help employees become involved and satisfied with their jobs. If organizations fail to provide clear role information to employees can counter the resulting uncertainty with relevant affective resources. In the long run, it can be translated into fewer intentions to leave the organization and higher retention rates.

ambiguity to

emplovee

turnover

#### Theoretical framework

Relationship between role ambiguity and turnover intentions

The concerns about turnover intentions have been noticed by both scholars and practitioners (De Clercq and Belausteguigoitia, 2017), as there are significant costs for organizations (Dodanwala *et al.*, 2023; Firth and Britton, 1989). Turnover is a situation in which an employee ceases to be a member of an organization (Ngo-Henha, 2018). It can be classified into two dimensions: involuntary (the permanent release of an employee from his/her employment due to diverse reasons) or voluntary (employees' decision to leave the organization at their own will; Mbah and Ikemefuna, 2012). Voluntary turnover might occur due to diverse reasons. Among the most identified ones are the lack of job satisfaction, job distress or high role ambiguity (Bothma and Roodt, 2013). Irrespective of voluntary or involuntary, turnover has a significant effect on organizations in terms of cost, knowledge and skill losses (Hinkin and Tracey, 2000; Ramlall, 2003; Tracey and Hinkin, 2008).

Turnover intention or the intent to quit is defined as an individual's awareness of leaving an organization soon (Mowday *et al.*, 2013). That is, the decision is not finalized yet, but the intention exists (Dodanwala *et al.*, 2023). It is the most frequently used variable to predict turnover because it is considered the strongest predictor of actual turnover (Tett and Meyer, 1993; Joo and Park, 2010; Cho and Lewis, 2012).

The social exchange theory (Blau, 1964) may help to understand employee turnover intentions. The core principle of the theory is that the relationship between employees and employers depends on the extent to which each party respects the implicitly and explicitly agreed social rules and norms of exchange (Blau, 1964; Junça-Silva, 2022). These norms and rules might include, for instance, the level of information that employees perceive to have about their roles – role ambiguity. Furthermore, the social rules and norms of exchange are based on the reciprocity rule – employees should be treated according to how they treat their employers (Junça-Silva and Silva, 2023). Hence, from a social exchange perspective, the turnover intention is a result of the nonrespect of implicitly or explicitly agreed rules by the employer. That is, employees might decide to leave the organization when they perceive the existence of a breach in prior agreements, (e.g., lack of clarity about their role in the organization). Indeed, employees may interpret this lack of information about their job duties as a sign of disrespect, prompting negative responses to their employer (Kahn et al., 1964). When this happens, they may "retaliate" by looking for other alternative employers. Hence, when the organization fails to explain their job duties clearly and does not seem to care about their personal success it is likely that turnover intentions increase (De Clercq and Belausteguigoitia, 2017; Wong et al., 2007).

Empirically, some studies have already shown that role ambiguity leads to turnover (Shin *et al.*, 2020). For instance, role ambiguity was shown to positively predict both turnover and emotional exhaustion among managers (Shin *et al.*, 2020). Furthermore, Hoseini *et al.* (2021) showed that role ambiguity led to turnover intentions among nurses. Similarly, Hill *et al.* (2015) using a sample of health-care workers demonstrated that role ambiguity positively influenced turnover intentions via role conflict over time. De Clercq and Belausteguigoitia (2017) evidenced that employees, in the distribution sector when faced with higher levels of role ambiguity, their turnover intentions were enhanced.

As such, relying on the social exchange theory and empirical studies, we defined the following:

H1. Role ambiguity negatively predicts turnover intentions.

Relationship between role ambiguity and job involvement and satisfaction

The lack of clear information about the job roles, or the so-called role ambiguity, makes employees feel uncertain about what they have to do, how they must do and when it must be done (Chen *et al.*, 2011). Hence, when they do not know how to act or what is expected from them, they tend to feel bad or frustrated, particularly if this happens regularly (Schmidt *et al.*, 2014). These reactions often influence the degree to which employees feel involved with their work and their overall levels of satisfaction with it (Abramis, 1994; Orgambídez and Extremera, 2020).

The JD-R (Bakker and Demerouti, 2007; Demerouti *et al.*, 2001) highlight that job demands influence employees' burnout and mental health, thereby accounting for the energetic process. For Schaufeli and Bakker (2004, p. 296), job demands are "physical, psychological, social, or organizational aspects of the job that require certain sustained physical and/or psychological effort and are therefore associated with certain physiological and psychological costs". Hence, in the energetic process, job demands decrease employees' mental and physical energy and, as a result, contribute to distress (Bakker and Demerouti, 2007). However, job demands, such as role ambiguity, do not influence the motivational process – the one that predicts affective outcomes, such as work engagement, job involvement or satisfaction (Bakker and Demerouti, 2007).

Even though the JD-R argues that job demands have no influence on the motivational process, we argue that role ambiguity – a very common job demand impairs the motivational process because it decreases work motivation and work engagement (Schaufeli and Bakker, 2004; Hakanen *et al.*, 2006) and other affective constructs such as job involvement (the level/degree in which people are known from their work, participate actively in it, and consider their achievements important for self-esteem" (Robbins and Judge, 2013, p. 91) and job satisfaction – the cognitive evaluation about the job as a whole (Warr *et al.*, 2014).

Indeed, some studies have evidenced that some job demands (e.g. role ambiguity, workload, role stress or time pressures) negatively influence the motivational process due to decreases in the motivational and affective outcomes (Mauno *et al.*, 2007; Orgambidez and Extremera, 2020; Searle and Auton, 2015). For instance, the meta-analysis of Podsakoff *et al.* (2007) demonstrated a positive relation between challenge demands and job motivation and job satisfaction, and a negative association between hindrance demands and motivation and satisfaction. Furthermore, other studies demonstrated the differential influences of challenge and hindrance demands on the motivational process (Min *et al.*, 2015; Tadic *et al.*, 2014). Moreover, Dawson *et al.* (2016) also showed that job demands, such as role ambiguity and role conflict predicted the motivational process as each one influenced work engagement, work involvement and job satisfaction. Similarly, Schmidt *et al.* (2014) demonstrated the same pattern of results.

Relying on the empirical studies described we defined the following:

H2. Role ambiguity negatively predicts job involvement (H2a) and job satisfaction (H2b).

Relationship between job involvement and satisfaction and turnover intentions

Job involvement (the active participation in one's job or the degree to which employees are actively engaged in it to achieve intrinsic needs creating feelings of satisfaction (Allport, 1958; Zopiatis et al., 2014) and job satisfaction (subjective evaluation toward all aspects of work) have been demonstrated to be crucial antecedents of employee turnover (Ali Jadoo et al., 2015; Kwon and Park, 2019; Yu et al., 2020). Indeed, when job involvement and job

ambiguity to

emplovee

turnover

satisfaction decrease, there is likely to be an increase in employees' turnover intentions (Dodanwala *et al.*, 2021; Egan *et al.*, 2004; Lee *et al.*, 2016; Tett and Meyer, 1993).

This happens because as Paullay *et al.* (1994) argued, an integral part of employees' self-concept is the degree to which they are involved and satisfied with their job. As a result, when employees are involved with the job, they are more committed to their work, satisfied with their organization and tend to exert effort to attain a job and organizational goals (Ineson *et al.*, 2013; Rotenberry and Moberg, 2007), and are thus less likely to have turnover intentions (Kuruüzüm *et al.*, 2009).

Empirically, diverse studies are showing the relationship between both job involvement and turnover and job satisfaction and turnover (Sjöberg and Sverke, 2000; Yu *et al.*, 2020). For instance, Mohsin *et al.* (2013) showed that affective constructs such as job satisfaction influenced employees' turnover intentions. Similarly, Jang and George (2012) showed that job satisfaction decreased the turnover intentions of hospitality employees. Other studies showed that when employees presented higher levels of job satisfaction and involvement, there were fewer turnover intentions (Chen and Wang, 2019).

Hence, one can argue that both job involvement and job satisfaction may prevent the intentions of employees to quit the organization. Relying on these findings, the following hypotheses were defined:

H3. Job involvement (H3a) and job satisfaction (H3b) negatively predict turnover intentions.

#### Serial mediation model

Even though the relationship between role ambiguity and turnover intentions has been consistently evidenced (De Clercq and Belausteguigoitia, 2017; Demerouti *et al.*, 2001), the mechanisms through which it occurs have been less studied (Dodanwala *et al.*, 2023). As we stated before, the JD-R argued that job demands – such as role ambiguity – create a process that de-energizes employees and thereby promotes conditions for an increase in their turnover intentions (Singh *et al.*, 2012). However, job demands may also impair the motivational process because they trigger distress and other negative affective states that, in the long run, demotivate employees, and reduce their involvement in the job and their satisfaction with it (Schaufeli and Bakker, 2004; Hakanen *et al.*, 2006).

Indeed, when employees have to face frequent job demands, such as role ambiguity – a hindrance demand – it may lead employees to feel uncertain about their role, contributing to their detachment from the job and, as a result, decreasing their levels of involvement and satisfaction with it.

Empirically, both job involvement and job satisfaction have been often identified as mediators between diverse work conditions and turnover intentions. For instance, professional identity was shown to have a significant indirect effect on turnover intention through job satisfaction (Rui *et al.*, 2018). Furthermore, De Simone *et al.* (2018) also showed that interpersonal interactions at work had an indirect effect on turnover intentions via job satisfaction. Similarly, Yu and Lee (2018) evidenced that job involvement mediated the effect of the work environment on burnout and turnover intention.

As such, relying on the JD-R and empirical studies, the following hypothesis was defined (Figure 1):

H4. Job involvement and job satisfaction operate as serial mediators between role ambiguity and turnover intentions.

#### Method

Participants and procedure

The sample was composed of full-time managerial, techniques and administrative employees working in Portugal. The organizations covered four main occupational sectors in Portugal, namely, health (13.9%), services (44.3%), administrative (22.8%) and education (19.2%). The researchers contacted the human resource department of different organizations to get their consent for data collection. With the help of the human resources manager of each organization, participants were contacted and briefed about the information related to the study. The surveys were distributed face-to-face by the researchers after employees signed an informed consent form. Participating employees were assured of their anonymity and confidentiality.

Overall, 505 valid responses were obtained, of which 59.8% were female. The participants' age ranged from 25 to 56 years, with a mean of 37.85 (SD = 9.51), and a mean organizational tenure of 10.04 (SD = 7.71). Regarding educational degrees, 57.4% of respondents owned a diploma or above and 27.7% had a high school diploma. Most participants were technicians (32.5%), administrative (24.8%) or operational employees (18.6%), whereas 24.2% described having managerial and supervision occupations.

#### Measures

In this research, we chose to use a seven-point agreement scale for all instruments, Lozano *et al.* (2008) reliability is maximized when the response alternatives are increased. Furthermore, Dalmoro and Vieira (2013) argue that the use of scales with different formats tends to confuse respondents, which is why it should be avoided.

Role ambiguity. The three items that assessed role ambiguity were adapted from the questionnaire developed by Rizzo et al. (1970; e.g. "In my job I know what my responsibilities are"). All items were positively worded and could be answered using a seven-point Likert scale ranging from 1 = very false to 5 = very true (Cronbach's alpha = 0.86 and average variance extracted [AVE] = 0.60).

Job involvement. We used three items from the questionnaire developed by O'Reilly and Chatman (1986) to evaluate the organizational commitment and psychological attachment in a work context (e.g. "The reason I prefer this organization to others is because of what it stands for, its values."). Respondents indicated, on a seven-point scale, the degree to which they agreed or disagreed with each statement (1 = totally disagree; 7 = totally agree) (Cronbach's alpha = 0.86; AVE = 0.78).

*Job satisfaction.* To evaluate job satisfaction, we used the three items formulated by O'Reilly and Caldwell (1981). Participants indicated, on a seven-point scale, how satisfied they were (1 – nothing satisfied: 7 – completely satisfied) (Cronbach's alpha = 0.82; AVE = 0.74).

Turnover intentions. We used the questionnaire developed by Jenkins (1993). It comprises three items (e.g. "I will probably look for a new job next year"), whose answers

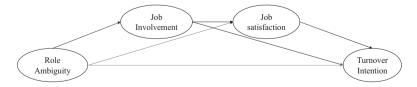


Figure 1.
Hypothesized research model

Source: Authors' own work

ambiguity to employee

turnover

were given using a five-point Likert scale (1 = Strongly disagree to 5 = Strongly agree) (Cronbach's alpha = 0.77; AVE = 0.68).

# Control variables

We used age and sex as control variables. Age may influence not only turnover intentions but also the affective mechanisms (i.e. job involvement and job satisfaction) because as individuals get older, the affective reactions tend to be less vulnerable to the context (Dello Russo *et al.*, 2021). We also used sex as a control because sex differences may account for differences in the criterion variable (i.e. turnover intentions; Weisberg and Kirschenbaum, 1993).

# Data analysis

First, the multivariate normality was assessed by checking Mardia's statistics (Mardia, 1970) using the Web Power tool available at https://webpower.psychstat.org/models/kurtosis/. This gives information about the skewness and kurtosis coefficients and the p-value. Byrne (2012) emphasized that Mardia's standardized coefficient should be greater than the threshold of 5 (p > 0.05) to consider the data as normally distributed. The result showed that the data did not follow multivariate normality (Mardia's coefficient<sub>skewness</sub> = 3.43, p < 0.001; Mardia's coefficient<sub>kurtosis</sub> = 30.29, p < 0.001). Hence, we followed the structural equation modeling using JASP software (Love *et al.*, 2019).

Then, to test for the common method bias, Harman's single factor test was performed, using SPSS 28. The results showed that 27.36% of the total variance was explained by the first factor, which is below the criterion of 40% proposed by Podsakoff *et al.* (2003). Second, we performed the bivariate correlations procedure as suggested by Bagozzi *et al.* (1991). The results showed that the highest inter-construct correlation was 0.73, a value below the 0.90 threshold (Bagozzi *et al.*, 1991). Third, we performed a full collinearity test, whereby the highest pathological VIF for all constructs was 2.41, which is below the recommended threshold of 3.3 (Kock and Lynn, 2012). Therefore, based on these findings, it can be concluded that common method bias was not a severe issue in this study.

#### Results

# Preliminary analyses

The ranges of skewness (from -1.06 to 1.05) and kurtosis (from -0.21 to 1.14) for all the main variables were in the acceptable range (-2 to +2) to perform structural equation modelling (SEM; Lam and Zhou, 2020). Table 1 shows the descriptive statistics and

Variables	M	SD	1	2	3	4	5
1. Role ambiguity	2.45	1.02	(0.86)				
2. Job involvement	3.63	0.96	-0.58**	(0.86)			
3. Job satisfaction	3.89	0.88	-0.56**	0.73**	(0.82)		
4. Turnover intention	2.56	1.05	0.37**	-0.50**	-0.52**	(0.77)	
5. Age	37.85	9.51	0.02	-0.06	-0.09	-0.06	_
6. Gender	_	_	-0.09	0.03	0.06	0.01	-0.09

Notes: N = 505; Cronbach's alphas are in brackets. Gender = 1 – male; 2 – female; \*\*\*p < 0.001; \*\*p < 0.01; \*\*p < 0.05

Source: Authors' own work

Table 1.

Mean, standard deviations and bivariate correlations among the variables

correlations between the variables under study. All the variables showed significant associations between them, however, neither age nor gender was significantly associated with the main variables. Furthermore, composite reliability and AVE values for all variables were greater than the threshold values of 0.7 and 0.5 (Hair *et al.*, 2018), respectively.

# Evaluation of the measurement model

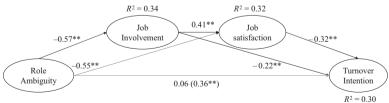
We performed four confirmatory factor analyses using maximum likelihood estimation on the variance/covariance matrices to estimate the reliability and validity of the main variables. The results indicated an acceptable model fit for the proposed four-factor model (role ambiguity, job involvement, job satisfaction and turnover):  $\chi^2_{(84)} = 168.839$ ,  $\chi^2/\mathrm{d}f = 2.009$ , comparative fit index (CFI) = 0.99, Tucker Lewis index (TLI) = 0.99, root mean square error of approximation (RMSEA) [90% confidence interval (CI)] = 0.04 [0.03, 0.05], standardized root mean square residuals (SRMR) = 0.04. All the parameter estimates were significant at the p < 0.001 level and the standardized estimates for all items were acceptable, ranging from 0.57 to 0.97. Moreover, this model showed a better fit when compared with the other tested models. Plus, the internal consistency of all the main variables ranged from 0.77 to 0.86.

# Test of the mediation model

In testing the proposed mediation model, we followed Hayes' (2013) recommendation to check the partial correlation between job involvement and job satisfaction while controlling for role ambiguity. Our results showed that the initial correlation between job involvement and job satisfaction was significant [ $r_{(503)} = 0.73$ , p < 0.001], and that this relationship remained significant when controlling for role ambiguity [ $r_{(503)} = 0.56$ , p < 0.001]. Moreover, we used SEM with a maximum likelihood estimation to test whether the relationship between role ambiguity and turnover intentions was mediated by job involvement and job satisfaction.

As shown in Figure 2, the model fit of the serial mediation model was acceptable:  $\chi^2_{.(87)} = 218.69$ ,  $\chi^2/df = 2.51$ , CFI = 0.99, TLI = 0.99, RMSEA [90% CI] = 0.05 [0.04, 0.06], SRMR = 0.04. Role ambiguity had a significant total effect on turnover intentions ( $\beta = 0.36$ , p < 0.001), thereby supporting H1.

Role ambiguity had a significantly negative effect on job involvement and job satisfaction. Hence, *H2* received support. Furthermore, job involvement had a positive effect on job satisfaction, and both job involvement and job satisfaction had significant effects on



**Notes:** Only the latent variables are presented in this figure. Solid lines indicate significant paths. The effects were reported in standardized values. The total effect of role ambiguity on turnover intention was shown in parenthesis. \*p < 0.05; \*\*\*p < 0.001

Source: Authors' own work

Figure 2.
Mediating effect of job involvement and job satisfaction on the relationship between role ambiguity and turnover intention

emplovee

ambiguity to

Role

turnover intentions, supporting H3. When controlling for the effect of job involvement and job satisfaction, the direct effect of role ambiguity on turnover intentions was no longer significant ( $\beta = 0.06$ , p > 0.05). Next, we estimated 5000 bias-corrected bootstraps with 95% CIs. After the bootstrapping, we found a serial mediating effect in that role ambiguity promoted turnover intentions through job involvement and then job satisfaction ( $\beta = 0.30$ , 95% CI [0.24, 0.37], p < 0.001). Thus, H4 was thereby supported by the data.

Furthermore, we used Hayes' (2013) SPSS macro-PROCESS (Model 6) with 5000 bias-corrected bootstraps to examine the indirect effect of life satisfaction and perceived distress separately. This approach allows the simultaneous examination of the indirect effect through up to four parallel mediators and provides pairwise comparisons between the proposed indirect effects (Hayes, 2013). The results showed that job involvement mediated the association between role ambiguity and turnover intentions (B = 0.13, SE = 0.04, 95% CI [0.06, 0.21]), as did job satisfaction (B = 0.07, SE = 0.02, 95% CI [0.07, 0.17]). We then conducted pairwise comparisons among the three indirect effects to test whether they exerted equal impacts on the association between role ambiguity and turnover intentions (Table 2). The results indicated that the indirect effect of role ambiguity on turnover intentions through job involvement was significantly greater than the indirect effect through job satisfaction (B = 0.07, SE = 0.05, 95% CI [-0.02, 0.16]), which in turn was smaller than the serial mediating effect (B = -0.05, SE = 0.02, 95% CI [-0.11, -0.01]).

# Discussion

This study aims to contribute to a better understanding of how role ambiguity predicts turnover intentions. For that, it relies on the JD-R model to test the mediating role of two affective mechanisms – job involvement and job satisfaction – in the role ambiguity-turnover path.

The results contribute to the JD-R model by further explaining the roles of motivational mechanisms in employee attitudes. The findings show that role ambiguity indeed creates conditions for employees who intend to quit the organization because they become less involved and dissatisfied with their jobs.

The data analysis revealed that role ambiguity negatively predicts workers' turnover intentions, thus validating *H1*. These findings contradict some initial expectations (Shin *et al.*, 2020) and provide valuable insights into the dynamics between role ambiguity and

		Bootstrapping CI			
Effects	B	SE	Lower	Upper	
Total indirect effect			,		
Model 1: Role ambiguity $\rightarrow$ Job involvement $\rightarrow$ Turnover intentions	0.13	0.04	0.06	0.21	
Model 2: Role ambiguity $\rightarrow$ Job satisfaction $\rightarrow$ Turnover intentions	0.07	0.02	0.03	0.10	
Model 3: Role ambiguity $\rightarrow$ Job involvement $\rightarrow$ Job satisfaction $\rightarrow$					
Turnover intentions	0.12	0.03	0.07	0.17	Table 2.
Contrasts					Comparisons of
Model 1 versus Model 2	0.07	0.05	-0.02	0.16	indirect effects of role
Model 1 versus Model 3	0.01	0.06	-0.09	0.12	ambiguity through
Model 2 versus Model 3	-0.05	0.02	-0.10	-0.01	job involvement and
	job satisfaction on turnover intention				

employees' tenure in the organization. According to Saberi *et al.* (2023), the lack of clear information about the role a worker plays significantly influences their desire to leave the organization. Our data indicate that role ambiguity may, in fact, act as a protective factor against employees' decisions to leave the organization. Similar results were found by Hoseini *et al.* (2021), suggesting that workers facing role ambiguity appear to be less likely to consider the possibility of departure. One possible interpretation for this negative relationship could be that, in an environment of role ambiguity, workers may be more tolerant of uncertainty or find ways to cope with the lack of clarity. This adaptation may reduce turnover intentions because employees may perceive ambiguity as a characteristic of the work environment (Glazer, 2021).

The results further revealed that when workers perceive a lack of clarity regarding their roles and responsibilities, they tend to feel less engaged in the tasks they perform. These findings support H2a and align with studies conducted by Awan  $et\ al.$  (2021), demonstrating that employees expressing unawareness of their professional duties exhibit a heightened desire to leave the organization of their employment. This lack of clarity concerning their responsibilities and duties is reflected in the levels of work engagement, which can significantly influence employees' levels of commitment and satisfaction. In this context, Martdianty  $et\ al.$  (2020) argue that when workers perceive their job as crucial in attaining organizational objectives, they experience increased engagement in their tasks, leading to higher levels of satisfaction (H2b).

In addition, it was found that work engagement (*H3a*) and job satisfaction (*H3b*) are factors that negatively predict turnover intentions, as evidenced in the studies by Yu *et al.* (2020). The data revealed that employees who actively engage in their tasks and demonstrate a high level of commitment to their work are less likely to consider turnover as an option. According to Dodanwala *et al.* (2021), this active engagement can be interpreted as a protective factor, possibly because employees feel more connected and invested in their responsibilities. The negative relationship between job satisfaction and turnover intentions emphasizes the importance of promoting a work environment that meets the needs and expectations of employees (Chen and Wang, 2019). In this context, Yu *et al.* (2020) argue that when individuals engage with their work, satisfaction levels tend to increase and the willingness to leave the organization is reduced.

Finally, it was observed that job engagement and satisfaction act as serial mediators between role ambiguity and turnover intentions (*H4*). These findings align with those reported by Ahmad *et al.* (2019), asserting that a lack of clarity regarding job roles results in a state of uncertainty, compelling employees to seek alternative workplaces. They further posit that role ambiguity can adversely impact job satisfaction and engagement, subsequently increasing turnover intentions (Pulawan and Nitiwidari, 2022). Understanding these processes provides valuable insights aimed at mitigating role ambiguity, promoting job engagement and satisfaction, thereby contributing to talent retention and bolstering human capital within organizations.

# Theoretical implications

First, the findings show that role ambiguity increases turnover intentions. This has been already demonstrated and is theoretically supported by the JD-R. Indeed, JD-R explains that job demands, such as role ambiguity, influence employees' burnout distress, which serves to increase the need and the desire to quit the organization (Bakker and Demerouti, 2007; Carlson *et al.*, 2017). This has been named the energetic process as employees gradually lose their physical and mental energy and resources to invest in the work tasks (Demerouti *et al.*, 2001) triggering the need to leave the organization – as a strategy to recover the lost energy and resources.

emplovee

ambiguity to

Role

Second, this study goes further by demonstrating the role of affective mechanisms linking job demands to turnover intentions. That is, while role ambiguity negatively influences both job involvement and job satisfaction, both elements also negatively contribute to turnover intentions. Furthermore, both job involvement and job satisfaction appear to mediate the path from role ambiguity to turnover intentions. In other words, the higher the role ambiguity, the less job involvement and job satisfaction which, in turn, enhances turnover intentions. Even though some studies have evidenced the isolated role of job involvement in turnover intention (Sjöberg and Sverke, 2000; Yu et al., 2020) and job satisfaction as well (Ali Jadoo et al., 2015; Chen and Wang, 2019; Dodanwala et al., 2023); so far, no study has explored the serial mediating role of job involvement and job satisfaction on the relationship between role ambiguity and turnover intentions. Hence, this research creates a better understanding of the affective mechanisms through which role ambiguity influences turnover intentions.

Third, the JD-R argues that job demands, particularly, hindrance demands, such as role ambiguity, influence the energetic process and thereby increase employees' turnover intentions (Bakker and Demerouti, 2007; Demerouti *et al.*, 2001; Saberi *et al.*, 2023). However, this research shows that role ambiguity decreases the employees' levels of involvement in the job, as well as their satisfaction with it, and in turn, increases turnover intentions. Hence, job demands, such as role ambiguity not only account for the energetic process but also the motivational one because they influence affective constructs (job involvement and job satisfaction) that, in turn, create action tendencies (i.e. turnover intention).

At last, the findings give support to the serial mediation model but the indirect effect of role ambiguity on turnover intention via job involvement appear to have a stronger effect than the model in which job satisfaction mediates the path from role ambiguity to turnover intention and the serial mediation model. This enhances the understanding about the differential mediating roles that job involvement and job satisfaction have on the relationship between role ambiguity and turnover intentions. Moreover, the results also highlight that job involvement accounted for a significantly larger proportion of the total effect of role ambiguity on turnover intentions than job satisfaction. That is, job involvement may play a crucial role in explaining how role ambiguity influences attitudes toward the organization and the need to quit it.

### Limitations and future directions

This research has some limitations. The first is related to the sample as mostly it is composed of female participants. Hence, to replicate the findings, future studies could resort to larger samples and a homogeneous quantity of both male and female participants. The second is related to the use of self-reported data which may account for the common method bias. Even though we have taken some measures to assess it, future studies could rely on multiple sources of data, such as measures reported by coworkers or supervisors. The third limitation is related to the research design. We used a cross-sectional design to test the proposed model, however, cross-sectional designs do not allow us to test causality (Levin, 2006); hence, findings should be understood with some caution. Future research should consider testing the model with dynamic designs such as daily or longitudinal ones. Daily or longitudinal designs allow the establishment of causality in the proposed model and at the same time to understand both within-person and between-person fluctuations (Junça-Silva et al., 2023).

Future studies could also test other affective mechanisms involved in the relationship between role ambiguity and turnover intentions. For instance, it should be relevant to test work engagement or organizational commitment as affective mechanisms in the link between role ambiguity – or other job demands (e.g. role conflict) and turnover intentions.

# Practical implications

The findings present relevant conclusions for practical application, particularly for the Portuguese working context. In the present era, Portuguese organizations find themselves grappling with a notable surge in turnover rates, presenting a formidable challenge in the realm of employee retention. The escalating turnover rates have manifested as a considerable obstacle, making it increasingly arduous for these organizations to retain their valuable workforce. This trend reflects a broader issue within the contemporary business landscape, where the retention of skilled and experienced employees has become a pressing concern. Therefore, the integration of role ambiguity, engagement, job satisfaction and turnover intentions in the same model serves to highlight the importance of investing in organizational support programs aimed at mitigating the adverse effects of role ambiguity on employee satisfaction and retention. This has not been previously undertaken within the Portuguese context.

The fact that role ambiguity improves turnover intentions should signal managers to reduce role ambiguity at work. For instance, it should be relevant to improve communication channels in organizations, clarify job rules and responsibilities and communicate in a clearer way what is expected from each one. It is also relevant to update the job analysis and descriptions whenever needed and actualize each employee accordingly.

Moreover, when considering newcomers, organizations might benefit from investing in socialization mechanisms and sustained practices that on one hand clarify job roles through on-the-job training programs and on the other hand promote the connection between newcomers and more experienced colleagues in similar job positions (Brown and Treviño, 2014; Harris *et al.*, 2014). Furthermore, socialization could also serve to promote job involvement and in the long run, increase their satisfaction (De Clercq and Belausteguigoitia, 2017). If organizations fail to provide clear role information to employees can counter the resulting uncertainty with relevant affective resources. For that, managers can also promote formal or informal meetings to better connect employees.

Furthermore, as job involvement and job satisfaction might counteract employees' intention to quit, managers should create strategies to enhance both job involvement and satisfaction. For example, improving or making available resources (e.g. open communication) for employees to deal with job demands. Informal strategies such as informal meetings could also enhance involvement in the job. Job characteristics such as flextime, telework and job autonomy could also serve as promoters of both job involvement and satisfaction. Improving job involvement and satisfaction could help employees contain the detrimental effects of role ambiguity on attitudes, such as turnover intentions.

In conclusion, the recent surge in turnover rates within Portuguese organizations underscores the need for a strategic reevaluation of employee retention practices. Recognizing the multifaceted nature of the issue, organizations must adapt to the evolving expectations of the modern workforce, fostering an environment that not only attracts but also retains top-tier talent in the face of an increasingly competitive job market.

## Conclusion

This study contributes to extant research by explicating how the two affective mechanisms of job involvement, and job satisfaction might diminish employees' desire to leave the organization when they face increasing role ambiguity. Together, these two affective

ambiguity to employee

turnover

mechanisms represent a comprehensive set of factors that offset the uncertainty that comes with information deficiencies in definitions of job responsibilities.

#### References

- Abramis, D. (1994), "Work role ambiguity, job satisfaction, and job performance: meta-analyses and review", *Psychological Reports*, Vol. 75 No. 3\_suppl, pp. 1411-1433, doi: 10.2466/pr0.1994.75.3f.14.
- Ahmad, M., Allen, M., Raziq, M. and Ur Rehman, W. (2019), "Converging HRM practices? A comparison of high-performance work system practices in MNC subsidiaries and domestic firms in Pakistan", Employee Relations: The International Journal, Vol. 41 No. 5, pp. 931-948, doi: 10.1108/ER-01-2018-0021.
- Ali Jadoo, S., Aljunid, S., Dastan, I., Tawfeeq, R., Mustafa, M., Ganasegeran, K. and AlDubai, S. (2015), "Job satisfaction and turnover intention among Iraqi doctors-a descriptive cross-sectional multicentre study", *Human Resources for Health*, Vol. 13 No. 1, pp. 1-11, doi: 10.1186/s12960-015-0014-6.
- Allport, G. (1958), "The ego in contemporary psychology", in Stacey, C. and DeMartino, M. (Eds), Understanding Human Motivation, Howard Allen Publishers, pp. 140-158, doi: 10.1037/11305-013
- Awan, F., Dunnan, L., Jamil, K., Gul, R., Anwar, A., Idrees, M. and Guangyu, Q. (2021), "Impact of role conflict on intention to leave job with the moderating role of job embeddedness in banking sector employees", Frontiers in Psychology, Vol. 12, pp. 1-13, doi: 10.3389/fpsyg.2021.719449.
- Bagozzi, R., Yi, Y. and Phillips, L. (1991), "Assessing construct validity in organizational research", Administrative Science Quarterly, Vol. 36 No. 3, pp. 421-458, doi: 10.2307/2393203.
- Bakker, A. and Demerouti, E. (2007), "The job demands-resources model: state of the art", *Journal of Managerial Psychology*, Vol. 22 No. 3, pp. 309-328, doi: 10.1108/02683940710733115.
- Blau, P. (1964), Exchange and Power in Social Life, Wiley, New York, NY.
- Bothma, C. and Roodt, G. (2013), "The validation of the turnover intention scale", SA Journal of Human Resource Management, Vol. 11 No. 1, pp. 1-12, doi: 10.4102/sajhrm.v11i1.507.
- Brown, M. and Treviño, L. (2014), "Do role models matter? An investigation of role modeling as an antecedent of perceived ethical leadership", *Journal of Business Ethics*, Vol. 122 No. 4, pp. 587-598, doi: 10.1007/s10551-013-1769-0.
- Byrne, B. (2012), "Choosing structural equation modeling computer software: snapshots of LISREL, EQS, AMOS, and Mplus,", in Hoyle, R. (Ed.), *Handbook of Structural Equation Modeling*, The Guilford Press, New York, NY, pp. 307-324.
- Carlson, J., Carlson, D., Zivnuska, S., Harris, R. and Harris, K. (2017), "Applying the job demands resources model to understand technology as a predictor of turnover intentions", *Computers in Human Behavior*, Vol. 77, pp. 317-325, doi: 10.1016/j.chb.2017.09.009.
- Chen, M., Lin, C. and Lien, G. (2011), "Modelling job stress as a mediating role in predicting turnover intention", *The Service Industries Journal*, Vol. 31 No. 8, pp. 1327-1345, doi: 10.1080/02642060903437543.
- Chen, H. and Wang, C. (2019), "Incivility, satisfaction and turnover intention of tourist hotel chefs: Moderating effects of emotional intelligence", *International Journal of Contemporary Hospitality Management*, Vol. 31 No. 5, pp. 2034-2053, doi: 10.1108/IJCHM-02-2018-0164.
- Cho, Y. and Lewis, G. (2012), "Turnover intention and turnover behavior: implications for retaining federal employees", *Review of Public Personnel Administration*, Vol. 32 No. 1, pp. 4-23, doi: 10.1177/0734371X11408701.
- Collie, R. (2023), "Job demands and resources, teachers' subjective vitality, and turnover intentions: an examination during COVID-19", Educational Psychology, Vol. 43 No. 5, pp. 452-471, doi: 10.1080/ 01443410.2022.2036323.

- Dalmoro, M. and Vieira, K. (2013), "Dilemmas of the type Likert scales construction: does the number of items and the disposition influence results?" Revista Gestão Organizacional, Vol. 6 No. 3, pp. 161-174.
- Dawson, K., O'Brien, K. and Beehr, T. (2016), "The role of hindrance stressors in the job demand-controlsupport model of occupational stress: a proposed theory revision", *Journal of Organizational Behavior*, Vol. 37 No. 3, pp. 397-415, doi: 10.1002/job.2049.
- De Clercq, D. and Belausteguigoitia, I. (2017), "Reducing the harmful effect of role ambiguity on turnover intentions: the roles of innovation propensity, goodwill trust, and procedural justice", *Personnel Review*, Vol. 46 No. 6, pp. 1046-1069, doi: 10.1108/PR-08-2015-0221.
- De Simone, S., Planta, A. and Cicotto, G. (2018), "The role of job satisfaction, work engagement, self-efficacy and agentic capacities on nurses' turnover intention and patient satisfaction", *Applied Nursing Research*, Vol. 39, pp. 130-140, doi: 10.1016/j.apnr.2017.11.004.
- Dello Russo, S., Antino, M., Zaniboni, S., Caetano, A. and Truxillo, D. (2021), "The effect of age on daily positive emotions and work behaviors", Work, Aging and Retirement, Vol. 7 No. 1, pp. 9-19, doi: 10.1093/workar/waz026.
- Demerouti, E., Bakker, A., Nachreiner, F. and Schaufeli, W. (2001), "The job demands resources model of burnout", *Journal of Applied Psychology*, Vol. 86 No. 3, pp. 499-512, doi: 10.1037/0021-9010.86.3.499.
- Dodanwala, T., Santoso, D. and Yukongdi, V. (2023), "Examining work role stressors, job satisfaction, job stress, and turnover intention of Sri Lanka's construction industry", *International Journal of Construction Management*, Vol. 23 No. 15, pp. 2583-2592, doi: 10.1080/15623599.2022.2080931.
- Dodanwala, T., Shrestha, P. and Santoso, D. (2021), "Role conflict related job stress among construction professionals: the moderating role of age and organization tenure", *Construction Economics and Building*, Vol. 21 No. 4, pp. 21-37, doi: 10.5130/AJCEB.v21i4.7609.
- Egan, T., Yang, B. and Bartlett, K. (2004), "The effects of organizational learning culture and job satisfaction on motivation to transfer learning and turnover intention", *Human Resource Development Quarterly*, Vol. 15 No. 3, pp. 279-301, doi: 10.1002/hrdq.1104.
- Firth, H. and Britton, P. (1989), "Burnout', absence and turnover amongst British nursing staff", *Journal of Occupational Psychology*, Vol. 62 No. 1, pp. 55-59, doi: 10.1111/j.2044-8325.1989.tb00477.x.
- Glazer, S. (2021), "Organizational role ambiguity as a proxy for uncertainty avoidance", *International Journal of Intercultural Relations*, Vol. 85, pp. 1-12, doi: 10.1016/j.ijintrel.2021.08.011.
- Hair, J., Black, W., Babin, B., Anderson, R. and Tatham, R. (2018), Multivariate Data Analysis, Pearson Prentice Hall, New York, NY.
- Hakanen, J., Bakker, A. and Schaufeli, W. (2006), "Burnout and work engagement among teachers", Journal of School Psychology, Vol. 43 No. 6, pp. 495-513, doi: 10.1016/j.jsp.2005.11.001.
- Harris, T., Li, N., Boswell, W., Zhang, X. and Xie, Z. (2014), "Getting what's new from newcomers: empowering leadership, creativity, and adjustment in the socialization context", *Personnel Psychology*, Vol. 67 No. 3, pp. 567-604, doi: 10.1111/peps.12053.
- Hayes, A. (2013), Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach, Guilford Press, New York, NY.
- Hill, K., Chênevert, D. and Poitras, J. (2015), "Changes in relationship conflict as a mediator of the longitudinal relationship between changes in role ambiguity and turnover intentions", *International Journal of Conflict Management*, Vol. 26 No. 1, pp. 44-67, doi: 10.1108/IJCMA-11-2013-0091.
- Hinkin, T. and Tracey, J. (2000), "The cost of turnover: putting a price on the learning curve", Cornell Hotel and Restaurant Administration Quarterly, Vol. 41 No. 3, pp. 14-21, doi: 10.1177/001088040004100313.
- Hoseini, M., Asayesh, H., Amaniyan, S., Sharififard, F., Elahi, A. and Kopaie, S. (2021), "Role conflict and role ambiguity as predictors of turnover intention among nurses", *Journal of Nursing and Midwifery Sciences*, Vol. 8 No. 1, pp. 49-53, doi: 10.4103/JNMS\_JNMS\_62\_20.

ambiguity to

emplovee

turnover

- Ineson, E., Benke, E. and László, J. (2013), "Employee loyalty in Hungarian hotels", International Journal of Hospitality Management, Vol. 32, pp. 31-39, doi: 10.1016/j.ijhm.2012.04.001.
- Jang, J. and George, R. (2012), "Understanding the influence of polychronicity on job satisfaction and turnover intention: a study of non-supervisory hotel employees", *International Journal of Hospitality Management*, Vol. 31 No. 2, pp. 588-595, doi: 10.1016/j.ijhm.2011.08.004.
- Jenkins, J. (1993), "Self-monitoring and turnover: the impact of personality on intent to leave", *Journal of Organizational Behavior*, Vol. 14 No. 1, pp. 83-91, doi: 10.1002/job.4030140108.
- Joo, B. and Park, S. (2010), "Career satisfaction, organizational commitment, and turnover intention: the effects of goal orientation, organizational learning culture and developmental feedback", *Leadership* and Organization Development Journal, Vol. 31 No. 6, pp. 482-500, doi: 10.1108/01437731011069999.
- Junça-Silva, A. (2022), "Should I pet or should I work? Human-animal interactions and (tele) work engagement: an exploration of the underlying within-level mechanisms", *Personnel Review*, doi: 10.1108/PR-09-2022-0588.
- Junça-Silva, A. and Silva, D. (2023), "The buffering effect of micro-daily events on the relationship between the dark triad traits and counterproductive work behavior", *Management Research Review*, Vol. 46 No. 5, pp. 667-681, doi: 10.1108/MRR-12-2021-0864.
- Junça-Silva, A., Mosteo, L. and Lopes, R. (2023), "The role of mindfulness on the relationship between daily micro-events and daily gratitude: a within-person analysis", *Personality and Individual Differences*, Vol. 200, pp. 1-7, doi: 10.1016/j.paid.2022.111891.
- Kahn, R., Wolfe, D., Quinn, R., Snoek, J. and Rosenthal, R. (1964), Organizational Stress: Studies in Role Conflict and Ambiguity, John Wiley, New York, NY.
- Kock, N. and Lynn, G. (2012), "Lateral collinearity and misleading results in variance-based SEM: an illustration and recommendations", *Journal of the Association for Information Systems*, Vol. 13 No. 7, pp. 546-580, doi: 10.17705/1jais.00302.
- Kuruüzüm, A., Ipekçi Çetin, E. and Irmak, S. (2009), "Path analysis of organizational commitment, job involvement and job satisfaction in Turkish hospitality industry", *Tourism Review*, Vol. 64 No. 1, pp. 4-16, doi: 10.1108/16605370910948821.
- Kwon, K. and Park, J. (2019), "The life cycle of employee engagement theory in HRD research", *Advances in Developing Human Resources*, Vol. 21 No. 3, pp. 352-370, doi: 10.1177/1523422319851443.
- Lam, K. and Zhou, M. (2020), "A serial mediation model testing growth mindset, life satisfaction, and perceived distress as predictors of perseverance of effort", *Personality and Individual Differences*, Vol. 167, pp. 1-5, doi: 10.1016/j.paid.2020.110262.
- Lee, Y., Kwon, K., Kim, W. and Cho, D. (2016), "Work engagement and career", Human Resource Development Review, Vol. 15 No. 1, pp. 29-54, doi: 10.1177/1534484316628356.
- Levin, K. (2006), "Study design III: cross-sectional studies", Evidence-Based Dentistry, Vol. 7 No. 1, pp. 24-25, doi: 10.1038/sj.ebd.6400375.
- Love, J., Selker, R., Marsman, M., Jamil, T., Dropmann, D., Verhagen, J., Jamil, T., Dropmann, D., Verhagen, J., Ly, A., Gronau, Q., Šmíra, M., Epskamp, S., Matzke, D., Wild, A., Knight, P., Rouder, J., Morey, R. and Wagenmakers, E. (2019), "JASP: graphical statistical software for common statistical designs", *Journal of Statistical Software*, Vol. 88 No. 2, pp. 1-17, doi: 10.18637/jss.v088.i02.
- Lozano, L., García-Cueto, E. and Muñiz, J. (2008), "Effect of the number of response categories on the reliability and validity of rating scales", *Methodology*, Vol. 4 No. 2, pp. 73-79, doi: 10.1027/1614-2241.4.2.73.
- Mardia, K. (1970), "Measures of multivariate skewness and kurtosis with applications", *Biometrika*, Vol. 57 No. 3, pp. 519-530, doi: 10.1093/biomet/57.3.519.
- Martdianty, F., Coetzer, A. and Susomrith, P. (2020), "Job embeddedness of manufacturing SME employees in Indonesia", *Employee Relations: The International Journal*, Vol. 42 No. 1, pp. 180-193, doi: 10.1108/ER-01-2019-0087.

- Mauno, S., Kinnunen, U. and Ruokolainen, M. (2007), "Job demands and resources as antecedents of work engagement: a longitudinal study", *Journal of Vocational Behavior*, Vol. 70 No. 1, pp. 149-171, doi: 10.1016/j.jvb.2006.09.002.
- Mbah, S. and Ikemefuna, C. (2012), "Job satisfaction and employees' turnover intentions in total Nigeria PLC in Lagos state", *International Journal of Humanities and Social Science*, Vol. 2 No. 14, pp. 275-287.
- Min, H., Kim, H. and Lee, S. (2015), "Extending the challenge–hindrance stressor framework: the role of psychological capital", *International Journal of Hospitality Management*, Vol. 50, pp. 105-114, doi: 10.1016/j.ijhm.2015.07.006.
- Mohsin, A., Lengler, J. and Kumar, B. (2013), "Exploring the antecedents of intentions to leave the job: the case of luxury hotel staff", *International Journal of Hospitality Management*, Vol. 35, pp. 48-58, doi: 10.1016/j.ijhm.2013.05.002.
- Mowday, R., Porter, L. and Steers, R. (2013), Employee-Organization Linkages: The Psychology of Commitment, Absenteeism, and Turnover, Academic Press, New York, NY.
- Ngo-Henha, P. (2018), "A review of existing turnover intention theories", *International Journal of Economics and Management Engineering*, Vol. 11 No. 11, pp. 2760-2767, doi: 10.5281/zenodo.1316263.
- O'Reilly, C. and Caldwell, D. (1981), "The commitment and job tenure of new employees: some evidence of post-decisional justification", *Administrative Science Quarterly*, Vol. 26 No. 4, pp. 597-616, doi: 10.2307/2392342.
- O'Reilly, C. and Chatman, J. (1986), "Organizational commitment and psychological attachment: the effects of compliance, identification, and internalization on prosocial behavior", *Journal of Applied Psychology*, Vol. 71 No. 3, pp. 492-499, doi: 10.1037/0021-9010.71.3.492.
- Orgambídez, A. and Extremera, N. (2020), "Understanding the link between work engagement and job satisfaction: do role stressors underlie this relationship?" *Scandinavian Journal of Psychology*, Vol. 61 No. 3, pp. 443-449, doi: 10.1111/sjop.12613.
- Paullay, I., Alliger, G. and Stone-Romero, E. (1994), "Construct validation of two instruments designed to measure job involvement and work centrality", *Journal of Applied Psychology*, Vol. 79 No. 2, pp. 224-228, doi: 10.1037/0021-9010.79.2.224.
- Podsakoff, N., LePine, J. and LePine, M. (2007), "Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: a meta-analysis", *Journal of Applied Psychology*, Vol. 92 No. 2, pp. 438-454, doi: 10.1037/0021-9010.92.2.438.
- Podsakoff, P., MacKenzie, S., Lee, J. and Podsakoff, N. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903, doi: 10.1037/0021-9010.88.5.879.
- Pulawan, I. and Nitiwidari, D. (2022), "Role of job satisfaction, work-life balance and job embeddedness on turnover intention nurse in Denpasar", *EPRA International Journal of Economic and Business Review*, Vol. 10 No. 10, pp. 35-45, doi: 10.36713/epra11637.
- Ramlall, S. (2003), "Organizational application managing employee retention as a strategy for increasing organizational competitiveness", Applied HRM Research, Vol. 8 No. 2, pp. 63-72.
- Rizzo, J., House, R. and Lirtzman, S. (1970), "Role conflict and ambiguity in complex organizations", Administrative Science Quarterly, Vol. 15 No. 2, pp. 150-163, doi: 10.2307/2391486.
- Robbins, S. and Judge, T. (2013), Organisational Behavior, 15th ed., Pearson, London.
- Rotenberry, P. and Moberg, P. (2007), "Assessing the impact of job involvement on performance", Management Research News, Vol. 30 No. 3, pp. 203-215, doi: 10.1108/01409170710733278.
- Rui, H., Lin, W., Jingping, L., Zhang, D. and Hongliang, L. (2018), "The mediating effects of job satisfaction on the association between doctor-patient relationship and OCB among physicians in China", *Iranian Journal of Public Health*, Vol. 47 No. 5, p. 698.

ambiguity to

emplovee

turnover

- Saberi, H., Khoshakhlagh, A., Laal, F., Mirzahosseininejad, M., Hannani, M. and Bamel, U. (2023), "Investigating the reasons for turnover intention of workers in the spinning and weaving industries in Iran", Corporate Reputation Review, Vol. 26 No. 4, pp. 1-12, doi: 10.1057/s41299-022-00157-5.
- Schaufeli, W. and Bakker, A. (2004), "Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study", *Journal of Organizational Behavior*, Vol. 25 No. 3, pp. 293-315, doi: 10.1002/job.248.
- Schmidt, A., Borgwardt, S., Gerber, H., Wiesbeck, G.A., Schmid, O., Riecher-Rössler, A., Smieskova, R., Lang, U. and Walter, M. (2014), "Acute effects of heroin on negative emotional processing: relation of amygdala activity and stress-related responses", *Biological Psychiatry*, Vol. 76 No. 4, pp. 289-296, doi: 10.1016/j.biopsych.2013.10.019.
- Searle, B. and Auton, J. (2015), "The merits of measuring challenge and hindrance appraisals", *Anxiety*, *Stress, and Coping*, Vol. 28 No. 2, pp. 121-143, doi: 10.1080/10615806.2014.931378.
- Shin, Y., Hur, W., Park, K. and Hwang, H. (2020), "How managers' job crafting reduces turnover intention: the mediating roles of role ambiguity and emotional exhaustion", *International Journal* of Environmental Research and Public Health, Vol. 17 No. 11, pp. 3972-3989, doi: 10.3390/ ijerph17113972.
- Showail, S., McLean Parks, J. and Smith, F.L. (2013), "Foreign workers in Saudi Arabia: a field study of role ambiguity, identification, information-seeking, organizational support and performance", The International Journal of Human Resource Management, Vol. 24 No. 21, pp. 3957-3979, doi: 10.1080/09585192.2013.781521.
- Singh, P., Suar, D. and Leiter, M. (2012), "Antecedents, work-related consequences, and buffers of job burnout among Indian software developers", *Journal of Leadership and Organizational Studies*, Vol. 19 No. 1, pp. 83-104, doi: 10.1177/1548051811429572.
- Sjöberg, A. and Sverke, M. (2000), "The interactive effect of job involvement and organizational commitment on job turnover revisited: a note on the mediating role of turnover intention", Scandinavian Journal of Psychology, Vol. 41 No. 3, pp. 247-252, doi: 10.1111/1467-9450.00194.
- Slåtten, T., Svensson, G. and Sværi, S. (2011), "Service quality and turnover intentions as perceived by employees: antecedents and consequences", *Personnel Review*, Vol. 40 No. 2, pp. 205-221, doi: 10.1108/00483481111106084.
- Tadic, M., Bakker, A. and Oerlemans, W. (2014), "Challenge versus hindrance job demands and well-being: a diary study on the moderating role of job resources", *Journal of Occupational and Organizational Psychology*, Vol. 88 No. 4, pp. 702-725, doi: 10.1111/joop.12094.
- Tett, R. and Meyer, J. (1993), "Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on meta-analytic findings", *Personnel Psychology*, Vol. 46 No. 2, pp. 259-293, doi: 10.1111/j.1744-6570.1993.tb00874.x.
- Tijani, B., Jin, X. and Osei-Kyei, R. (2021), "A systematic review of mental stressors in the construction industry", *International Journal of Building Pathology and Adaptation*, Vol. 39 No. 2, pp. 433-460, doi: 10.1108/IJBPA-02-2020-0011.
- Tracey, J. and Hinkin, T. (2008), "Contextual factors and cost profiles associated with employee turnover", *Cornell Hospitality Quarterly*, Vol. 49 No. 1, pp. 12-27, doi: 10.1177/0010880407310191.
- Warr, P., Bindl, U., Parker, S. and Inceoglu, I. (2014), "Four-quadrant investigation of job-related affects and behaviours", European Journal of Work and Organizational Psychology, Vol. 23 No. 3, pp. 342-363, doi: 10.1080/1359432X.2012.744449.
- Weisberg, J. and Kirschenbaum, A. (1993), "Gender and turnover: a re-examination of the impact of sex on intent and actual job changes", *Human Relations*, Vol. 46 No. 8, pp. 987-1006, doi: 10.1177/001872679304600805.
- Wong, S.-S., DeSanctis, G. and Staudenmayer, N. (2007), "The relationship between task interdependency and role stress: a revisit of the job demands-control model", *Journal of Management Studies*, Vol. 44 No. 2, pp. 284-303, doi: 10.1111/j.1467-6486.2007.00689.x.

- Yu, M. and Lee, H. (2018), "Impact of resilience and job involvement on turnover intention of new graduate nurses using structural equation modeling", *Japan Journal of Nursing Science*, Vol. 15 No. 4, pp. 351-362, doi: 10.1111/jjns.12210.
- Yu, J., Ariza-Montes, A., Giorgi, G., Lee, A. and Han, H. (2020), "Sustainable relationship development between hotel company and its employees: linking job embeddedness, job satisfaction, selfefficacy, job performance, work engagement, and turnover", Sustainability, Vol. 12 No. 17, pp. 7168-7183, doi: 10.3390/su12177168.
- Zopiatis, A., Constanti, P. and Theocharous, A. (2014), "Job involvement, commitment, satisfaction and turnover: evidence from hotel employees in Cyprus", *Tourism Management*, Vol. 41 No. 1, pp. 129-140, doi: 10.1016/j.tourman.2013.09.013.

#### About the authors

Ana Junça Silva, PhD in Human Resources Management, has developed her research around topics focused on affect and emotional work life, well-being and happiness together with an emphasis on interpersonal and intrapersonal outcomes. She has published her studies on international peer-reviewed journals such as *Personality and Individual Differences and Assessment*. Ana Junça Silva is the corresponding author and can be contacted at: <a href="mailto:analjsilva@gmail.com">analjsilva@gmail.com</a>

Rosa Rodrigues, PhD in Human resources Management, has developed her research around performance management and performance evaluation systems together with a special emphasis on organizational behavior. She has published her studies on diverse peer-reviewed international journals such as *Current Psychology*.