


RESEARCH ARTICLE

# Job resources and employees' intention to stay: the mediating role of meaningful work and work engagement

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## Abstract

Based on the Job Demands Resources Model (JD-R), this study investigates the mediating role of meaningful work and work engagement in the association between job resources and employees' intention to stay. A cross-sectional study was conducted through an online survey of 217 employees from different organizations in Puerto Rico. We examined a serial mediation analysis through structural equation modeling. The results indicate that job resources are positively related to meaningful work, while meaningful work is positively associated with work engagement. Further, job resources are indirectly associated with the intention to stay through meaningful work and work engagement. This study contributes to understanding the role of meaningful work and engagement in the JD-R model's motivational-driven process and how these mechanisms promote positive work outcomes in terms of the retention of human capital. Designing jobs and strategies at the workplace to develop meaning and engagement seems crucial to retain employees.

**Key words:** Intention to stay; job resources; meaningful work; work engagement

## Introduction

The retention of human capital is essential for organizations. High turnover rates are negatively related to organizational performance and cost thousands of dollars in losses every year for organizations (Park & Shaw, 2013; Work Institute, 2018). Understanding what drives individuals to stay in their jobs is imperative to design human resources strategies to retain human capital. Several personal, organizational, and contextual factors induce people to leave and stay in their jobs (Hom, Lee, Shaw, & Hausknecht, 2017). For example, a recent report shows that work characteristics and well-being (e.g., emotional, physical, and family-related aspects) are among the 10 reasons employees value staying in a job (Work Institute, 2018).

Intention to stay refers to the employees' willingness to remain in their current organization (Chew & Chan, 2008), and it is a critical determinant of turnover behavior (Tett & Meyer, 1993). Work environments that offer job resources will help reduce job demands, achieve goals, and stimulate personal growth, learning, and development to promote employee retention (Schaufeli & Bakker, 2004). Administrative support, challenging tasks, excellent communication, and work control are factors that support employees' decisions to remain in the current position (Cregård & Corin, 2019). Similarly, job stressors and work-related attitudes (e.g., employee engagement, job satisfaction, organizational commitment) are critical antecedents for employees to decide to stay in the organization (Podsakoff, LePine, & LePine, 2007).

According to the Job Demands-Resources Model (JD-R model), job resources, as motivational work features (e.g., skill variety, task variety, and task significance) promote positive psychological states that relate to favorable employees and organizational results (e.g., intention to stay at work) (Bakker & Demerouti, 2018; Bakker & de Vries, 2021; Demerouti, Bakker, & Xanthopoulou, 2019; Demerouti, Van den Heuvel, Xanthopoulou, Dubbelt, & Gordon, 2017; Schaufeli & Bakker, 2004). These job resources and their consequent positive psychological states support employees' decision to remain in the organization (Humphrey, Nahrgang, & Morgeson, 2007; Schaufeli & Bakker, 2004). These emphasize the importance of creating positive workplaces to attract and retain qualified employees. Based on the JD-R model motivational-driven process, we propose that job resources predict meaningful work, and this, in turn, predicts work engagement. Job resources provide meaning and satisfy employees' basic needs, which lead to increased work engagement (Bakker & Demerouti, 2018). Meaningful work generally refers to work that is personally significant and worthwhile, has been a primary psychological mechanism associated with motivational work features (Allan, Duffy, & Collisson, 2018; Humphrey et al., 2007; Lysova, Allan, Dik, Duffy, & Steger, 2019; Schnell, Höge, & Pollet, 2013), and a significant predictor of work engagement (Allan et al., 2019; Hulshof, Demerouti, & Le Blanc, 2020; Nel & Linde, 2019).

Therefore, it is expected that meaningful work and work engagement are significant psychological mechanisms to explain the relationship between job resources and intention to stay at work. This work contributes to the literature in two ways: (1) it integrates meaningful work as a psychological mechanism to explain work engagement based on the motivational process of the JD-R model; (2) and it examines the fundamental role that psychological features, in particular, the meaningful work and work engagement, play in the job design and the retention of human capital in organizations.

### **Theoretical background**

The JD-R model builds on other theories and influential models (e.g., the demands Control Model [Karasek, 1979], job characteristics theory [Hackman & Oldham, 1976], and conservation of resources [COR] theory [Hobfoll, Halbesleben, Neveu, & Westman, 2018]) to explain why job characteristics influence employee well-being and organizational outcomes (Bakker & Demerouti, 2017; Jenny, Bauer, Füllemann, Broetje, & Brauchli, 2020; Schaufeli & Taris, 2014). The JD-R model (Bakker & Demerouti, 2017, 2018; Demerouti et al., 2019) proposes that all job characteristics can be classified into job demands and job resources with a unique predictive value to work and well-being. Job demands are aspects of work that require effort and are associated with physical and psychological costs, such as workload and complex tasks (Bakker & de Vries, 2021; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Whereas job resources are those physical, psychological, social, and organizational aspects of the job that are functional in achieving work goals, reduce job demands and the associated psychological costs, or stimulate personal growth, learning, and development, such as skill and task variety (Bakker & Demerouti, 2017; Demerouti et al., 2001; Schaufeli & Taris, 2014). The JD-R model is broader and more flexible than previous models (i.e., Job characteristics model, Job Demands Control Model), and it includes a wide range of potential job demands and resources (Schaufeli & Taris, 2014). In the context of JD-R research, a variety of job characteristics and instruments has been used according to a recent meta-analysis (Lesener, Gusy, & Wolter, 2019).

The JD-R model proposes that job demands and job resources initiate two processes: a health-impairment and a motivational process. Job demands initiate the health-impairment process through increases in stress and chronic exhaustion, which results in health problems and a negative impact on performance. Meanwhile, job resources start a motivational process through the increase of work engagement, 'a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption' (Schaufeli, Salanova, González-Romá, & Bakker,

2002, p. 74). This motivational process leads to positive employee and work-related outcomes. Influenced by the COR theory (Hobfoll *et al.*, 2018), the JD-R model assumes that resource gain has a positive effect on well-being and positive outcomes. This aligns with the central proposition of the COR theory, which assumes that people strive to maintain and expand their resources or those things that they centrally value. Employees with adequate job resources are better equipped to deal with challenging situations and are less susceptible to stress, and hence, experience positive motivational and well-being states.

Job resources (task variety, skill variety, and task significance) have a motivating potential and contribute to making work more meaningful, satisfying, and engaging (Albrecht & Marty, 2020; Hackman & Oldham, 1976; Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008). Early conceptualization of engagement proposed by Kahn (1990) included three psychological conditions (meaningfulness, safety, and availability) ‘whose presence influenced people to personally engage and whose absence influenced them to personally disengage’ (p. 703). Kahn (1990) indicated that personal engagement was connected to higher levels of psychological meaningfulness and that three factors generally influence psychological meaningfulness: task characteristics, role characteristics, and work interactions. Although Kahn’s (1990) early work was pivotal for the inception of work engagement and recent evidence has proved the role of meaningful work as an antecedent of engagement (Allan *et al.*, 2019; Fletcher, Bailey, & Gilman, 2018; Soane *et al.*, 2013), meaningful work is arguably excluded from the JD-R model (Berthelsen, Hakanen, & Westerlund, 2018).

Bakker and Demerouti (2017) argued the need for future research on the psychological processes involved in the health impairment and motivational process in the JD-R model. In this line, Dan, Roşca, and Mateizer (2020) introduce work meaning within the JD-R model’s motivational framework and found that job crafting impacts work engagement through meaningful work. Similarly, based on Kahn’s (1990) ideas, Fletcher *et al.* (2018) found that meaningfulness mediated the relationships between perceptions of the work context and state engagement. These findings encourage further research on how meaning relates to positive outcomes through its link with work engagement (Dan *et al.*, 2020). We expand this previous research studying the role of job resources as the predictors of meaningful work and how it relates to work engagement (Kahn, 1990) to promote positive employee outcomes (intention to stay), suggesting the pivotal role of meaning in the motivational-driven process of the JD-R model.

### **Job resources**

Job resources are essential for rewarding and meaningful work (Van Veldhoven *et al.*, 2020). According to Bakker and Demerouti (2018), ‘job resources provide meaning and satisfy people’s basic needs, job resources are motivating and contribute positively to work engagement’ (p. 2). Meta-analytical evidence links job resources to well-being and positive employee and organizational outcomes (i.e., performance, proactivity) (Christian *et al.*, 2011; Rudolph *et al.*, 2017). For example, research has found positive associations of job resources with meaningful work (Allan *et al.*, 2019), work engagement (Saks, 2019), and turnover intentions (Wan, Li, Zhou, & Shang, 2018). As indicated by the COR theory and the motivational-driven process of the JD-R, resources motivate and energize employees (Van den Broeck, Ferris, Chang, & Rosen, 2016).

The JD-R model expands on previous models (e.g., Job Characteristics Model, Job Demands-Control), indicating that different jobs and organizations may have distinctive job characteristics. Therefore, it is more flexible in the inclusion of diverse job resources (and demands) (Schaufeli & Taris, 2014). Based on the idea of Kahn (1990), who indicated that task characteristics influence meaningfulness, and empirical evidence related to job characteristics, we considered task variety, skill variety, and task significance as job resources in this paper. Empirical evidence demonstrates that task variety and task significance are strongly related to meaningful work compared to other dimensions of job characteristics (Allan *et al.*, 2018;

Schnell et al., 2013). Skill utilization is also related to work engagement, particularly among employees with an intrinsic work value orientation (Van den Broeck, Schreurs, Guenter, & Van Emmerik, 2015). These resources have been demonstrated to be essential job design elements to enhance meaningfulness as a psychological state with beneficial outcomes (e.g., engagement, performance) (Bailey, Madden, Alfes, Shantz, & Soane, 2017; Kahn, 1990; Lysova et al., 2019). Employees who perceive more resources will also experience more meaningful work. We proposed the following hypothesis:

H1: Job resources (task variety, skill variety, and task significance) are positively related to meaningful work.

### ***The mediating role of meaningful work and work engagement***

Based on the JD-R model motivational-driven process, the recent propositions of understanding its possible underlying mechanisms (Bakker & Demerouti, 2017), and building on the early proposal of meaning as a psychological condition for engagement (Kahn, 1990), we propose that meaningful work is a psychological mechanism which links job resources to work engagement, which in turn predicts positive work outcomes such as the intention to stay.

Work plays a vital role in people's lives and fosters satisfaction, meaning, and purpose (Blustein, 2008; Steger, Dik, & Duffy, 2012a, 2012b). Meaning at work refers to the subjective experience that people have about whether their work has purpose and meaning and whether it allows them to generate a more significant benefit (Pratt & Ashforth, 2003; Steger, 2017). Meaning at work has indispensable benefits for individuals, groups, and organizations (Wrzesniewski, 2003). For example, it is related to higher psychological well-being (Arnold, Turner, Barling, Kelloway, & McKee, 2007) and a lower level of anxiety and depression (Steger et al., 2012a, 2012b). Furthermore, people who find meaning at work report greater satisfaction (Douglass, Duffy, & Autin, 2016; Steger et al., 2012a, 2012b), more commitment (Jung & Yoon, 2016), experience greater enjoyment (Steger & Dik, 2010), are more intrinsically motivated, experience less job boredom (Sánchez-Cardona, Vera, Martínez-Lugo, Rodríguez-Montalbán, & Marrero-Centeno, 2020), and have more intention to stay at their work (Duffy, Dik, & Steger, 2011; Fairlie, 2011; Steger et al., 2012a, 2012b).

Previous research provides evidence of meaningful work's relevance as a psychological mechanism in the relationship between job resources and employee well-being (Fletcher et al., 2018) as well as of engagement as a mediator between meaningful work- and work-related attitudes and outcomes (e.g., absence, commitment) (Geldenhuis, Laba, & Venter, 2014; Soane et al., 2013). However, neither of these previous research addresses job resources, engagement, and positive outcomes, as proposed by the motivation-driven process of the JD-R model, along with meaningful work. More recent models introduce meaningful work as a central mediator between job resources, motivational states, and job-related outcomes (Barrick, Mount, & Li, 2013).

Employees with a clear understanding of their strengths, purposes, and contributions are likely to physically, mentally, and emotionally dedicate themselves to their work duties. Therefore, it is expected that the meaning at work motivates people to be more engaged and improve their performance (Bakker & Demerouti, 2018; Steger & Dik, 2010). Work engagement refers to a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption. Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties. Dedication is characterized by a sense of significance, enthusiasm, inspiration, pride, and challenge. Finally, absorption is characterized by being fully concentrated and deeply engrossed in one's work, whereby time passes quickly, and one has difficulties with detaching oneself from work (Schaufeli et al., 2002, p. 74–75).

Employees improve their level of engagement when they experience high meaning at work; thus, meaningful work can be a way to improve employees' work engagement (Steger et al.,

2013). Kahn (1990) indicated that ‘Lack of meaningfulness was connected to people’s feeling that little was asked or expected of their selves and that there is little room for them to give or receive in work role performance’ (p. 704). Therefore, employees with a high sense of meaning could be physically and mentally energized by their work (vigor), found it easier to focus their attention on work tasks and feel deeply absorbed in their work (absorption), and valued their work as deeply significant and as a source of enthusiasm, inspiration, and pride (dedication) (Barrick *et al.*, 2013; Johnson & Jiang, 2017; Steger *et al.*, 2013). According to Chen, Zhang, and Vogel (2011), when employees report more meaning at work, their engagement increases much more than other psychological factors. Although meaningful work and work engagement are strongly related, they are conceptually distinct constructs. Allan *et al.* (2019), in their meta-analysis, concluded that, meaningful work is a motivational force that propels people toward goal-directed behaviors and leads to positive affective states associated with work engagement. Moreover, these authors suggested that meaningful work leads to motivational or attitudinal change first, which only then influences behavioral change. That is, it makes sense to think that meaningful work leads to work engagement, leading to intention to stay. This motivates the following hypothesis:

H2: Meaning at work is positively related to work engagement.

Both meaning and engagement are critical factors that contribute to employees’ decision to stay at work. Most of the research focuses on intention to leave (turnover) (Gabel Shemueli, Dolan, Suárez Ceretti, & Nuñez del Prado, 2016; Steffens, Yang, Jetten, Haslam, & Lipponen, 2018) in comparison to intention to stay (Cho, Johanson, & Guchait, 2009; Li *et al.*, 2020), considering both as the same construct (Mitchell, Holtom, Lee, Sablinsky, & Erez, 2001). Both refer to employees’ subjective estimation regarding their future in their current job (either deliberately looking to leave or remain in their current job). They may also be driven by different antecedents. For example, Cho *et al.* (2009) found that perceived organizational support and organizational commitment decreased intent to leave, while only perceived organizational support positively impacted the intention to stay. Interpersonal fairness, organizational-based self-esteem, and affective commitment have shown a significant association (indirectly and directly) to predict intention to stay (Tetteh, Osafo, Ansah-Nyarko, & Amponsah-Tawiah, 2019). Likewise, Arnoux-Nicolas, Sovet, Lhotellier, Di Fabio, and Bernaud (2016) showed that meaningful work is negatively related to turnover intentions and mediates the association between adverse working conditions and turnover intentions.

Although previous research demonstrates the association between work engagement, meaningful work, and intention to stay (Allan *et al.*, 2019; Landells & Albrecht, 2019; Wan *et al.*, 2018; You-De, Wen-Long, & Tzung-Chen, 2019), no previous study has considered both psychological resources together in the same researcher model to explain the association of job resources and employees’ willingness to remain at work. Additionally, most of this research is focused on turnover intention and not on the intention to stay. Therefore, within the JD-R model’s motivational-driven process, job resources are motivational work features that promote positive psychological states. More specifically, we expect task variety, skill variety, and task significance to have a positive relationship with meaning at work since these resources have been demonstrated to be essential job design elements to enhance meaningfulness as a psychological state. In turn, the experience of meaningful work has beneficial outcomes such as work engagement (*i.e.*, Allan *et al.*, 2019; Bailey *et al.*, 2017; Kahn, 1990). Within this motivational-driven process, job resources enhance meaningful work, which in turn affects work engagement (*i.e.*, Allan *et al.*, 2019). As a result, employees would increase their intention to stay at work (*i.e.*, Astvik, Welander, & Larsson, 2020). Finally, and considering the prior evidence on the association between work engagement, meaningful work, and intention to stay (*i.e.*, Landells, & Albrecht, 2019), we aim to extend research by including job resources in the model to test the relationship between these variables as a serial mediation based on the propositions of the JD-R model. Thus, we hypothesize:

H3: Meaning at work and work engagement mediate the relation between job resources and the intention to stay at work.

## Method

### Sample and procedure

This study sample consisted of 217 employees (66.3% women; 32.7% men) working in different Puerto Rico organizations. Human Resource managers or general supervisors of 16 organizations in the service, health, education, and nonprofit sectors were invited to forward to colleagues a confidential online voluntary questionnaire, aiming to learn more about associations with job-related demands and resources. The voluntary nature of participation was stressed, and contact details for the independent research team were provided; all participants electronically read and agreed to accept the potential risks and benefits. The questionnaire was confidential and did not include questions asking for information that could identify the participants. Therefore, it was not possible to compile information about how many participants from each organization completed the survey. The Research Committee for the Protection of Human Subjects in Research from the University of Puerto Rico, Río Piedras Campus, approved this study.

The age of the participants ranged from 22 to 70 ( $M = 34.02$ ,  $SD = 9.63$ ). Most of the participants reported having a university degree: Bachelor's (39.2%), Master's (31.3%), and Doctorate (13.4%) (15.7% had an associate degree or less). Sixty-five percent (65%) were working in private organizations, mostly in the health sector (26.3%), followed by services (25.3%), education (16.1%), and sales (6.5%) sectors. In terms of employment status, 78.3% reported having a full-time contract, while the majority (69.1%) did not hold a supervisory position.

### Measures

#### Job resources

A Spanish version of the task variety, skill variety, and task significance subscales from the Work Design Questionnaire was used to measure job resources (Bayona, Caballer, & Peiró, 2015; Morgeson & Humphrey, 2006). Each subscale has four items: task variety (e.g., My work includes a wide variety of tasks), task significance (e.g., My work has an important impact on people outside the organization), and skill variety to perform the work (e.g., My work requires a wide variety of skills). All items were answered with a 5-point Likert scale (1 = Strongly disagree; 5 = Strongly agree). Since these three subscales refer to job resources as conceptualized and measure in other research, we used a latent factor composed of each of the three subscales as observable variables. Each subscale showed adequate internal consistency: task variety ( $\alpha = .92$ ), task significance ( $\alpha = .87$ ), skill variety ( $\alpha = .84$ ). The job resources composite variable also showed good internal consistency ( $\alpha = .71$ ).

#### Meaningful work

We used three items translated and adapted to Spanish (Sánchez-Cardona et al., 2020) of the meaningful work scale developed by Arnold et al. (2007). These authors conceptualized meaning 'as finding a purpose in work that transcends the financial' (p. 198). In this measure, items included: 'The work I do in this job is fulfilling' and 'I am able to achieve important outcomes from the work I do in this job'. Participants answered the items using a 7-point Likert scale (1 = Strongly disagree; 7 = Strongly agree). This scale showed good internal consistency ( $\alpha = .86$ ).

#### Work engagement

We use the ultra-short version of the Utrecht Work Engagement Scale in Spanish (Schaufeli et al., 2019). This abbreviated version presents psychometric properties comparable to the nine-item

version in several languages, including Spanish. It includes an item belonging to each of the dimensions of work engagement: ‘In my work, I feel full of energy’ (vigor); ‘I am excited about the work I do’ (dedication); ‘I am immersed in my work’ (absorption). The items were answered using a 7-point Likert scale (0 = Never; 6 = Everyday). This scale showed good internal consistency ( $\alpha = .86$ ).

#### *Intention to stay*

It was measured with four items that refer to employees’ intention to remain in their current job (Price & Mueller, 1986). We translated this measure using the back-translation technique with two bilingual organizational psychologists with expertise in psychometrics. Confirmatory factor analysis showed a good fit to the one-factor solution:  $\chi^2 = 14.45$ ,  $df = 2$ , SRMR = .03, CFI = .97, TLI = .90. An example of an item is: ‘I plan to stay in this job as much as I can’ and ‘Under any circumstances would you voluntarily leave this job.’ All items were answered with a 5-point Likert scale (1 = Strongly disagree; 5 = Strongly agree). This measure showed good internal consistency ( $\alpha = .86$ ).

#### *Control variable*

We included age as a control variable in our model. Recent meta-analysis results demonstrated that age has a significant effect on intentions to leave the organization (Rubenstein, Eberly, Lee, & Mitchell, 2018). These results indicate that older workers are less likely to quit, while younger workers are more likely to quit. This pattern has been attributed to the differences in expectations that younger and older workers have regarding what they want from their employers (Rubenstein *et al.*, 2018).

#### *Data analysis*

We used structural equation modeling (SEM) with a maximum likelihood estimation method through AMOS v 27 to test the hypothesized model. Using SEM allows testing the effect of multiple variables simultaneously, which is essential to test the hypothesized serial mediation. Following the recommendations to conduct SEM analysis, we first tested the measurement model through a confirmatory factor analysis followed by the structural model.

This study was cross-sectional with self-reported measures; therefore, Harman’s single-factor test was performed to examine common method bias. Although the potential limitations of cross-sectional and self-reported design, some authors have demonstrated that they provide useful evidence for relationships among variables (Spector, 2019), especially among constructs that require the perception of participants.

We used the following absolute goodness-of-fit indices to assess the fit of the models:  $\chi^2$ , goodness of fit, root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). Since the  $\chi^2$  value is sensitive to the sample size, the use of relative goodness-of-fit indices is recommended (Bentler, 1990). We used three relative goodness-of-fit indices: incremental fit index (IFI), normed fit index (NFI), Tucker–Lewis index (TLI), in addition to the comparative fit index (CFI). RMSEA values that lower from .08 to .05 are indicative of an acceptable and good fit, respectively. A value of .08 or less for the SRMR is generally considered a good fit (Hu & Bentler, 1999). Values higher than .95 in the CFI, TLI, NFI, and IFI indicate a good model fit (Hu & Bentler, 1999). Finally, we computed the Akaike information criterion (AIC) to compare competing models (Huang, 2017; Weston & Gore, 2006). Lower values indicate a better fit; therefore, the model with the lowest AIC is the best-fitting model. The lower the AIC index, the better the fit is. To examine the significance of the indirect effect, we calculated bias-corrected bootstrapped confidence intervals using 5000 samples. If the confidence intervals do not include 0, it implies a significant indirect effect. We also tested an alternative model to determine how mediator variables in the model are not arbitrary (Kline, 2016; Weston & Gore, 2006).

## Results

### Preliminary analysis

Before testing the structural model, we conducted a series of confirmatory factor analyses with AMOS v. 27 in order to assess the discriminant validity of the scales. The four-factor model demonstrated a good fit to the data ( $\chi^2 = 154.41$ ,  $df = 58$ ,  $RMSEA = .08$ ,  $SRMR = .07$ ,  $CFI = .94$ ,  $TLI = .92$ ,  $IFI = .94$ ,  $NFI = .91$ ). This four-factor model fits the data better compared to a three-factor model grouping meaningful work and work engagement items into the same factor ( $\Delta\chi^2 = 147.68$ ,  $df = 3$ ,  $p < .001$ ;  $\chi^2 = 302.09$ ,  $df = 61$ ,  $RMSEA = .14$ ,  $SRMR = .09$ ,  $CFI = .85$ ,  $TLI = .80$ ,  $IFI = .85$ ,  $NFI = .82$ ). Besides, the four-factor model fits the data better compared to a two-factor model grouping meaningful work, work engagement, and intention to stay items into a single factor ( $\Delta\chi^2 = 324.46$ ,  $df = 5$ ,  $p < .001$ ;  $\chi^2 = 478.87$ ,  $df = 63$ ,  $RMSEA = .18$ ,  $SRMR = .12$ ,  $CFI = .73$ ,  $TLI = .67$ ,  $IFI = .74$ ,  $NFI = .70$ ) and to a one-factor model grouping items of all four constructs into a single factor ( $\Delta\chi^2 = 411.14$ ,  $df = 6$ ,  $p < .001$ ;  $\chi^2 = 565.55$ ,  $df = 64$ ,  $RMSEA = .19$ ,  $SRMR = .13$ ,  $CFI = .68$ ,  $TLI = .61$ ,  $IFI = .68$ ,  $NFI = .65$ ). Standardized factor loadings on this model (four factors) were higher than .50 (convergent validity), and correlations between latent variables were lower than .85 (discriminant validity) (Kline, 2016). Therefore, we conclude that all measures correspond to distinct constructs.

Besides, the average variance extracted (AVE) values for all variables were higher than .50, which indicates convergent validity for each measure (Fornell & Larcker, 1981). Likewise, the square root of the AVE indicates discriminant validity, with indices higher than inter-construct correlations. The composite reliability for each latent factor was also higher than the recommended value of .70 (Fornell & Larcker, 1981; Hair, Black, Babin, Anderson, & Tatham, 2006). These results provide evidence for the convergent and discriminant validity of the measures.

In this study, our data came from self-report data, which may be subject to common method bias. We used Harman's single-factor test to assess common method bias (Podsakoff et al., 2012). The results show that a single factor explains 37.03% of the variance, suggesting that common method bias is not a serious concern in this study.

Finally, before conducting the structural model, we checked for possible multicollinearity. Predictors' tolerance was higher than .20 (.50–.77), and the variance inflation factor was below 10 (1.28–1.29), showing no multicollinearity (Field, 2018).

### Descriptive analysis

Table 1 shows the descriptive statistics and correlations between variables. Job resources are not significantly related to the intention to stay at work. However, job resources are significantly related to meaningful work ( $r = .47$ ,  $p < .01$ ) and work engagement ( $r = .35$ ,  $p < .01$ ). Additionally, intention to stay is significantly related to work engagement ( $r = .43$ ,  $p < .01$ ) and meaningful work ( $r = .38$ ,  $p < .01$ ).

### Hypothesized model

We tested the hypothesized serial mediation model through SEM. The model showed a good fit to the data (see Table 2) and supported the proposed hypothesis. Job resources are significantly related to meaningful work ( $\beta = .46$ ,  $SE = .275$ ,  $p < .01$ ) (H1), and meaningful work is related to work engagement ( $\beta = .74$ ,  $SE = .05$ ,  $p < .01$ ) (H2). Finally, work engagement significantly relates to intention to stay at work ( $\beta = .51$ ,  $SE = .082$ ,  $p < .01$ ) (see Figure 1). We tested the direct effect of job resources on the intention to stay, but it was not significant ( $\beta = -.05$ ,  $SE = .20$ ,  $p = .526$ ). The indirect effect of the serial mediation job resources on the intention to stay through meaningful work and work engagement was also significant (indirect effect = .17,  $SE = .04$ , 95% CI



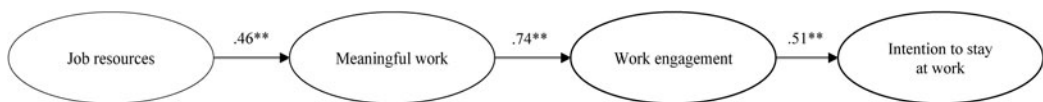
**Table 1.** Descriptive statistics, reliability, and correlations of the study variables

	M	SD	CR	AVE	1	2	3	4
1. Job resources	3.21	.65	.74	.50	(.71)			
2. Meaningful work	4.33	1.25	.88	.71	.47**	(.86)		
3. Work engagement	4.53	1.25	.86	.68	.35**	.66**	(.86)	
4. Intention to stay	2.21	1.11	.86	.61	.10 n.s.	.38**	.43**	(.86)
5. Age	34.02	9.63	–	–	.01 n.s.	.10 n.s.	.24**	.165*

\*\**p* < .01; n.s., nonsignificant; M, mean; SD, standard deviation; CR, composite reliability; AVE, average variance extracted. Cronbach's reliability index is shown in parenthesis in the diagonal.

**Table 2.** Indirect effects of the final mediation model

	Indirect effect	Bootstrap SE	95% Bootstrap confidence interval	
			LL	UL
Job resources ⇒ work engagement	.34**	.08	.20	.51
Meaningful work ⇒ intention to stay	.38**	.06	.25	.48
Job resources ⇒ intention to stay	.17**	.04	.10	.27



**Figure 1.** Mediation models with standardized effects.

[.10–.27]) (see Table 2) (H3). As hypothesized (H3), these results indicate a serial mediation of meaningful work and work engagement in the association between the job resources and intention to stay at work.

Finally, an alternative model (Model 2) was tested in which the order of the mediating variables was reversed to examine the possible nonarbitrariness of the causal process. This model showed a poor fit to the data compared to the previous model (Table 3). We compared the AIC of both models to determine which competing model shows the best fit (Huang, 2017; Weston & Gore, 2006). The hypothesized model showed a lower AIC indicating that this model has a better fit. These findings offer additional support to the proposed serial mediation model (Model 1), in which meaningful work predicts work engagement, and both serve as mediators in the association between job resources and intention to stay.

### Discussion

This article aimed to examine the mediating role of meaningful work and work engagement in the relation between job resources and the intention to stay at work. Based on the motivational-driven process proposed by the JD-R model, we examined meaningful work and work engagement as relevant psychological mechanisms to explain intention to stay at work. The findings

**Table 3.** Goodness-of-fit indices of the mediation model

	$\chi^2$	df	RMSEA	RMSEA 90% IC			SRMR	CFI	TLI	IFI	NFI	AIC
				Lower level	Upper level							
Model 1	182.45	73	.08	.07	.10	.08	.93	.91	.92	.89	274.45	
Model 2 (alternative)	201.66	73	.09	.08	.11	.10	.92	.90	.92	.88	293.66	

$\chi^2$ , chi-squared; RMSEA, root mean square error of approximation; SRMR, standardized root mean residual; TLI, Tucker-Lewis index; IFI, incremental fit index; NFI, normed fit index; AIC, Akaike information criterion.

indicate that job resources (task variety, skill variety, and task significance) are positively related to meaningful work (H1 is supported), meaningful work is positively related to work engagement (H2 is supported), and job resources are indirectly related to intention to stay through meaningful work and work engagement (H3 is supported). The test of the alternative model in the serial mediation in which work engagement predicts meaning showed a poor fit to the model. Taking together these results support the proposition of Kahn (1990) that meaningfulness predicts engagement as well as the key position of meaningful work in the motivational-driven process of the JD-R model. The need for meaningful work seems relevant in order to raise the levels of motivation and retention in organizations (Cartwright & Holmes, 2006).

The JD-R model provides a useful theoretical framework for understanding employees' intention to stay at work. Employees who perceive high job resources, specifically, task variety, task skill variety, and task significance, may experience their work as personally significant and worthwhile (increasing their meaningful work). Consequently, and as suggested by the motivational process, employees will feel more vigorous, dedicated, and absorbed in their work (increasing their work engagement). All this together will enhance their desire to stay in their current job (increasing their intention to stay). This is in line with Kahn's (1990) proposition of meaning as an antecedent of engagement and job characteristics as one of the possible precursors of meaningfulness. Following the JD-R model, we can conclude that job resources initiate a motivational process that contributes to making work more meaningful and engaging, ending in a desire to stay in the job. Thus, these findings support the proposition of the relevant role of meaningful work in the motivational process of the JD-R model.

Meaningful work and work engagement play a crucial role in the association between job resources and positive employee outcomes, such as the intention to stay. Previous meta-analytical results (Allan *et al.*, 2019) found that the best-fitting model was meaningful work predicting work engagement, which subsequently predicted withdrawal intentions. Furthermore, this meta-analysis revealed that engagement and meaningful work are distinctive constructs and that meaningful work adds significant value to the literature. Meaningful work seems to be a pivotal piece to understand why people decide to remain at work. Meaningful work originates from workers' evaluations about the job they perform and the purposes they derive from it. In this way, people may be less likely to leave a job that provides meaning and energizes their working lives (Steger, 2017). These results present an integrated model that helps understand the positive psychological mechanism that explains why workers decide to remain at work.

### ***Theoretical and practical implications***

Turnover is an expensive process for organizations. Thus, finding ways to increase employees' intention to stay will be crucial for human resources management. Moreover, although it is implicitly assumed that intention to stay and intention to leave are two sides of the same coin (Johnston, 1995), both constructs may entail unique antecedents. For example, Cho *et al.* (2009) concluded that factors affecting the intention to leave and stay are different. Since an organization's employment goal is to retain talented employees, human resources management researchers need to investigate other factors influencing employees' intention to stay, rather than focusing on what makes employees leave an organization.

Therefore, this study adds empirical evidence to the literature regarding the role of positive and well-being states as predictors of employee's intention to stay at work. First, this study's findings support the proposition that meaningful work is a relevant mechanism to explain the relationship between job resources and work engagement and intention to stay (Bakker & Demerouti, 2018). As suggested in recent developments of the JD-R model, additional psychological mechanisms are still needed in the model's proposed health impairment and motivational process (Bakker & Demerouti, 2017). Hence, this study contributes to consider meaningful work as an essential mechanism to link job resources and work engagement within the motivational process. This

study also contributes to providing evidence of the association of these variables in a culturally different sample of employees. Most research in psychology and organizations has been conducted with samples from western, educated, industrialized, rich, and democratic (WEIRD) nations, limiting their results' generalizability (Muthukrishna et al., 2020). As presented in this study, the hypothesized model is consistent with the theoretical basis and previous empirical evidence, which cross-validates the theoretical assumptions in a culturally diverse sample. However, more research is still needed to understand any cultural impact on the proposed model.

Job resources that are linked to intrinsic motivation may generate meaning (Barrick et al., 2013; Humphrey et al., 2007). According to Sonnentag (2017), resources and meaning are needed for employees to be engaged. Recent research suggests that meaning is an essential predictor of work engagement (Fairlie, 2011; Johnson & Jiang, 2017); thus, when employees perceive their work as meaningful, they are more likely to dedicate themselves physically, mentally, and emotionally at their work and less likely to leave their workplace (Shuck, Reio, & Rocco, 2011). The results from this study further the dialogue on the fundamental role of meaningful work within the JD-R model's motivational process as a psychological driver to promote work engagement and how both constructs promote the retention of human capital.

These findings contribute to managerial practice highlighting the role of well-being in employees' retention. This study demonstrates that the link between job resources and the intention to stay is fully mediated by meaning and work engagement. Job redesign strategies are crucial to optimize and enrich the work environments and promote meaning, motivation, and satisfaction (Bailey et al., 2017; Lysova et al., 2019; Parker, Morgeson, & Johns, 2017). Job redesign to enhance job resources helps to create a more thriving work environment that will support employees' decisions to stay. Job redesign also contributes to the person-job fit, supporting the use of employees' knowledge, skills, and interests, contributing to increasing meaning and well-being at work (Hansen, 2013; Sánchez-Cardona et al., 2020; Shuck et al., 2011). Bottom-up strategies, such as job crafting interventions (through which individuals proactively increase their job resources, challenging job demands, or reduce hindrance demands), increase both meaningful work and work engagement (Bakker, 2017; Lysova et al., 2019). Therefore, the design of optimal jobs and the appropriate selection and employees' development strategies are essential to stimulate meaning, motivation, and well-being, which contribute to employees' retention. Besides, continuous evaluation of meaning and engagement at work is necessary to develop and optimize strategies that promote these positive attitudes and well-being states among employees.

### **Limitations and future research**

Although the findings of this study provide contributions to the organizational and human resources literature and practice, they should be interpreted considering their limitations. First, the sample is relatively small; however, it represents employees from several organizations from diverse sectors across the country, allowing more heterogeneity and representativeness of the sample. Additionally, the data is limited to one country, which might constrain the generalizability of the results. Future studies should include larger and more representative samples from different countries to validate these results and to assess the association between these variables from a cross-cultural perspective.

Second, future studies should consider the inclusion of multiple job resources (as well as job demands) to explore their association with meaningful work to advance further the investigation of meaning within the motivational process of the JD-R model. Previous theoretical and empirical evidence provided support to the relation of task significance, skill variety, and ability variety with meaningful work (Hackman & Oldham, 1976). Likewise, other job resources, such as leadership (Arnold et al., 2007), have been shown to predict meaningful work significantly. Considering that the JD-R model 'does not restrict itself to specific job demands or job resources' (Schaufeli & Taris, 2014, p. 44), it would be appropriate to expand on the

investigation of diverse job resources as the predictors of meaningful work in the process to promote work engagement.

Third, common method bias could affect the data since all measures were collected using self-report and at a single point in time (Podsakoff *et al.*, 2007). Despite this limitation, methodological strategies were established to try to identify any severe deficiency. First, a single-factor Harman's test was performed using confirmatory factor analysis. Results indicate that the one-factor model showed a poor fit to the data compared to the four latent factors model. Convergent and discriminant validity results also support the distinctiveness of each measure. Second, an alternative model was tested where the order of mediating variables was reversed to examine the possible nonarbitrariness of the proposed causal process. This alternative model presented a poor fit to the data compared to the hypothesized model. Even though this alternative model's results support the hypothesized proposition, the study used a cross-sectional design, which limits causal inference between the relations of the variables. Future studies should further examine these associations using longitudinal designs or temporal separation in data collection of predictors and outcome variables. Besides, although it has been found that meaning is a predictor of work engagement, there is a lack of longitudinal designs to assess the causal effect of meaning on work engagement or reciprocal association that may exist between them. This research would be useful to understand further the association between meaningful work and engagement and its possible reciprocal and long-term effects and to understand better the role of meaningful work within the JD-R model's motivational process.

## Conclusion

This study examines the role of meaningful work and work engagement as psychological mechanisms that explain the intention to stay at work. The results indicate that job resources (task variety, skill variety, and task significance) influence the intention to stay at work through meaningful work and engagement. Building on the JD-R model motivational process, these findings support the role of meaningful work in predicting work engagement and promoting the intention to stay at work. Managers and human resources professionals should design jobs and advance strategies that stimulate meaning and engagement to retain human capital.

## References

- Albrecht, S. L., & Marty, A. (2020). Personality, self-efficacy and job resources and their associations with employee engagement, affective commitment and turnover intentions. *The International Journal of Human Resource Management*, 31(5), 657–681. doi:10.1080/09585192.2017.1362660
- Allan, B. A., Batz-Barbarich, C., Sterling, H. M., & Tay, L. (2019). Outcomes of meaningful work: A meta-analysis. *Journal of Management Studies*, 56(3), 500–528. doi:10.1111/joms.12406
- Allan, B. A., Duffy, R. D., & Collisson, B. (2018). Task significance and performance: Meaningfulness as a mediator. *Journal of Career Assessment*, 26(1), 172–182. doi:10.1177/1069072716680047
- Arnold, K. A., Turner, N., Barling, J., Kelloway, E. K., & McKee, M. C. (2007). Transformational leadership and psychological well-being: The mediating role of meaningful work. *Journal of Occupational Health Psychology*, 12(3), 193–203. doi:10.1037/1076-8998.12.3.193
- Arnoux-Nicolas, C., Sovet, L., Lhotellier, L., Di Fabio, A., & Bernaud, J. L. (2016). Perceived work conditions and turnover intentions: The mediating role of meaning of work. *Frontiers in Psychology*, 7, 704. doi:10.3389/fpsyg.2016.00704
- Astvik, W., Welander, J., & Larsson, R. (2020). Reasons for staying: A longitudinal study of work conditions predicting social workers' willingness to stay in their organisation. *The British Journal of Social Work*, 50(5), 1382–1400. doi:10.1093/bjsw/bcz103
- Bailey, C., Madden, A., Alfes, K., Shantz, A., & Soane, E. (2017). The mismanaged soul: Existential labor and the erosion of meaningful work. *Human Resource Management Review*, 27(3), 416–430.
- Bakker, A. B. (2017). Strategic and proactive approaches to work engagement. *Organizational Dynamics*, 46(2), 67–75. doi:10.1016/j.orgdyn.2017.04.002
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. doi:10.1037/ocp0000056

- Bakker, A. B., & Demerouti, E. (2018). Multiple levels in job demands-resources theory: Implications for employee well-being and performance. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being* (pp. 592–603). Salt Lake City, UT: DEF Publisher. <https://nobascholar.com>.
- Bakker, A. B., & de Vries, J. D. (2021). Job demands–resources theory and self-regulation: New explanations and remedies for job burnout. *Anxiety, Stress, & Coping*, 34(1), 1–21. doi:10.1080/10615806.2020.1797695
- Barrick, M. R., Mount, M. K., & Li, N. (2013). The theory of purposeful work behavior: The role of personality, higher-order goals, and job characteristics. *Academy of Management Review*, 38(1), 132–153. doi:10.5465/amr.2010.0479
- Bayona, J. A., Caballer, A., & Peiró, J. M. (2015). The work design questionnaire: Spanish version and validation. *Journal of Work and Organizational Psychology*, 31(3), 187–200. doi:10.1016/j.rpto.2015.06.001
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238–246. doi:10.1037/0033-2909.107.2.238
- Berthelsen, H., Hakanen, J. J., & Westerlund, H. (2018). Copenhagen psychosocial questionnaire – a validation study using the job demand–resources model. *PLoS ONE*, 13(4), e0196450. doi:10.1371/journal.pone.0196450
- Blustein, D. L. (2008). The role of work in psychological health and well-being: A conceptual, historical, and public policy perspective. *American Psychologist*, 63(4), 228–240. doi:10.1037/0003-066X.63.4.228
- Cartwright, S., & Holmes, N. (2006). The meaning of work: The challenge of regaining employee engagement and reducing cynicism. *Human Resource Management Review*, 16(2), 199–208. doi:10.1016/j.hrmmr.2006.03.012
- Chen, Z., Zhang, X., & Vogel, D. (2011). Exploring the underlying processes between conflict and knowledge sharing: A work-engagement perspective. *Journal of Applied Social Psychology*, 41(5), 1005–1033. doi:10.1111/j.1559-1816.2011.00745.x
- Chew, J., & Chan, C. C. A. (2008). Human resource practices, organizational commitment, and intention to stay. *International Journal of Manpower*, 29(6), 503–522. doi:10.1108/01437720810904194
- Cho, S., Johanson, M. M., & Guchait, P. (2009). Employees intent to leave: A comparison of determinants of intent to leave versus intent to stay. *International Journal of Hospitality Management*, 28(3), 374–381. doi:10.1016/j.ijhm.2008.10.007
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 89–136. <https://doi.org/10.1111/j.1744-6570.2010.01203.x>
- Cregård, A., & Corin, L. (2019). Public sector managers: The decision to leave or remain in a job. *Human Resource Development International*, 22(2), 158–176. doi:10.1080/13678868.2018.1563749
- Dan, C.-I., Roşca, A. C., & Mateizer, A. (2020). Job crafting and performance in firefighters: The role of work meaning and work engagement. *Frontiers in Psychology*, 11, 894. doi:10.3389/fpsyg.2020.00894
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. doi:10.1037/0021-9010.86.3.499
- Demerouti, E., Bakker, A. B., & Xanthopoulou, D. (2019). Job demands-resources theory and the role of individual cognitive and behavioral strategies. In T. Taris, M. Peeters, & H. De Witte (Eds.), *The fun and frustration of modern working life: Contributions from an occupational health psychology perspective* (pp. 94–104). Antwerpen: Pelckmans Pro.
- Demerouti, E., Van den Heuvel, M., Xanthopoulou, D., Dubbelt, L., & Gordon, H. J. (2017). Job resources as contributors to well-being. In C.L. Copper, & M.P. Leiter (Eds.), *The Routledge companion to well-being at work* (pp. 269–283). New York: Routledge. doi:10.1037/0021-9010.86.3.499.
- Douglass, R. P., Duffy, R. D., & Autin, K. L. (2016). Living a calling, nationality, and life satisfaction: A moderated, multiple mediator model. *Journal of Career Assessment*, 24(2), 253–269. doi:10.1177/1069072715580324
- Duffy, R. D., Dik, B. J., & Steger, M. F. (2011). Calling and work-related outcomes: Career commitment as a mediator. *Journal of Vocational Behavior*, 78(2), 210–218. doi:10.1016/j.jvb.2010.09.013
- Fairlie, P. (2011). Meaningful work, employee engagement, and other key employee outcomes: Implications for human resource development. *Advances in Developing Human Resources*, 13(4), 508–525. doi:10.1016/j.jvb.2010.09.013
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Thousand Oaks, CA: Sage Publications.
- Fletcher, L., Bailey, C., & Gilman, M. W. (2018). Fluctuating levels of personal role engagement within the working day: A multilevel study. *Human Resource Management Journal*, 28(1), 128–147. doi:10.1111/1748-8583.12168
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. doi:10.2307/3151312
- Gabel Shemueli, R., Dolan, S. L., Suárez Ceretti, A., & Nuñez del Prado, P. (2016). Burnout and engagement as mediators in the relationship between work characteristics and turnover intentions across two Ibero-American nations. *Stress and Health*, 32(5), 597–606. doi:10.1002/smi.2667
- Goldenhuis, M., Laba, K., & Venter, C. M. (2014). Meaningful work, work engagement, and organizational commitment. *SA Journal of Industrial Psychology*, 40(1), 1–10. doi:10.4102/sajip.v40i1.1098
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16(2), 250–279. doi:10.1016/0030-5073(76)90016-7
- Hair, J. F., Black, B., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice-Hall.
- Hansen, J. C. (2013). A person–environment fit approach to cultivating meaning. In B. Dik, Z. Byrne, & M. Steger (Eds.), *Purpose and meaning in the workplace* (pp. 37–56). Washington, DC: American Psychological Association. doi:10.1037/14183-003.

- Hobfoll, S. E., Halbesleben, J., Neveu, J. P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103–128. doi:10.1146/annurev-orgpsych-032117-104640
- Hom, P. W., Lee, T. W., Shaw, J. D., & Hausknecht, J. P. (2017). One hundred years of employee turnover theory and research. *Journal of Applied Psychology*, 102(3), 530–545. doi:10.1037/apl000010310.1016/j.hrmr.2016.11.001
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. doi:10.1080/10705519909540118
- Huang, P. H. (2017). Asymptotics of AIC, BIC, and RMSEA for model selection in structural equation modeling. *Psychometrika*, 82(2), 407–426. doi:10.1007/s11336-017-9572-y
- Hulshof, I. L., Demerouti, E., & Le Blanc, P. M. (2020). Day-level job crafting and service-oriented task performance: The mediating role of meaningful work and work engagement. *Career Development International*, 25(4), 355–371. doi:10.1108/CDI-05-2019-0111
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92(5), 1332–1356. doi:10.1037/0021-9010.92.5.1332
- Jenny, G. J., Bauer, G. F., Fülleman, D., Broetje, S., & Brauchli, R. (2020). ‘Resources-demands ratio’: Translating the JD-R-model for company stakeholders. *Journal of Occupational Health*, 62(1), e12101. doi:10.1002/1348-9585.12101
- Johnson, M. J., & Jiang, L. (2017). Reaping the benefits of meaningful work: The mediation versus moderating role of work engagement. *Stress and Health*, 33(3), 288–297. doi:10.1002/smi.2710
- Johnston, J. (1995). The determinants of service quality: Satisfiers and dissatisfiers. *International Journal of Service Industry Management*, 6(5), 53–71. doi:10.1108/09564239510101536
- Jung, H. S., & Yoon, H. H. (2016). What does work meaning to hospitality employees? The effects of meaningful work on employees’ organizational commitment: The mediating role of job engagement. *International Journal of Hospitality Management*, 53, 59–68. doi:10.1016/j.ijhm.2015.12.004
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724. doi:10.5465/256287
- Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24, 285–308. doi: 10.2307/2392498.
- Kline, R. B. (2016). *Principles and practice of structural equation modeling*. New York: The Guilford Press.
- Landells, E. M., & Albrecht, S. L. (2019). Perceived organizational politics, engagement and stress: The mediating influence of meaningful work. *Frontiers in Psychology*, 10, 1612. doi:10.3389/fpsyg.2019.01612
- Lesener, T., Gusy, B., & Wolter, C. (2019). The job demands-resources model: A meta-analytic review of longitudinal studies. *Work & Stress*, 33(1), 76–103. doi:10.1080/02678373.2018.1529065
- Li, X., Zhang, Y., Yan, D., Wen, F., & Zhang, Y. (2020). Nurses’ intention to stay: The impact of perceived organizational support, job control and job satisfaction. *Journal of Advanced Nursing*, 76(5), 1141–1150. <https://doi.org/10.1111/jan.14305>.
- Lysova, E. I., Allan, B. A., Dik, B. J., Duffy, R. D., & Steger, M. F. (2019). Fostering meaningful work in organizations: A multi-level review and integration. *Journal of Vocational Behavior*, 110, 374–389. doi:10.1016/j.jvb.2018.07.004
- Mitchell, T., Holtom, B., Lee, T., Sablynski, C., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal*, 44(6), 1102–1121. doi:10.2307/3069391
- Morgeson, F. P., & Humphrey, S. E. (2006). The work design questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91(6), 1321–1339. doi:10.1037/0021-9010.91.6.1321
- Muthukrishna, M., Bell, A. V., Henrich, J., Curtin, C. M., Gedranovich, A., McInerney, J., & Thue, B. (2020). Beyond Western, educated, industrial, rich, and democratic (WEIRD) psychology: Measuring and mapping scales of cultural and psychological distance. *Psychological Science*, 31(6), 678–701. doi:10.1177/0956797620916782
- Nel, J. H., & Linde, B. (2019). Antecedents and outcomes associated with high levels of engagement. In J. H. Nel, & B. Linde (Eds.), *The art of engaging unionised employees* (pp. 35–44). South Africa: Palgrave Pivot. doi:10.1007/978-981-13-2197-9\_3.
- Park, T.-Y., & Shaw, J. D. (2013). Turnover rates and organizational performance: A meta-analysis. *Journal of Applied Psychology*, 98(2), 268–309. doi:10.1037/a0030723
- Parker, S. K., Morgeson, F. P., & Johns, G. (2017). One hundred years of work design research: Looking back and looking forward. *Journal of Applied Psychology*, 102(3), 403–420. doi:10.1037/apl0000106
- Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, 92(2), 438–454. doi:10.1037/0021-9010.92.2.438
- Podsakoff, P. M., Mackenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>.

- Pratt, M.G., & Ashforth, B.E. (2003). Finding positive meaning in work. In K.S. Cameron, J.E. Dutton, & R.E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 309–327). San Francisco, CA: Berrett-Koehler.
- Price, J., & Mueller, C.W. (1986). *Handbook of organizational measurement*. Marshfield, MA: Pitman.
- Rubenstein, A. L., Eberly, M. B., Lee, T. W., & Mitchell, T. R. (2018). Surveying the forest: A meta-analysis, moderator investigation, and future-oriented discussion of the antecedents of voluntary employee turnover. *Personnel Psychology, 71*(1), 23–65. doi:10.1111/peps.12226
- Rudolph, C. W., Katz, I. M., Lavigne, K. N., & Zacher, H. (2017). Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *Journal of Vocational Behavior, 102*, 112–138. <https://doi.org/10.1016/j.jvb.2017.05.008>.
- Saks, A. M. (2019). Antecedents and consequences of employee engagement revisited. *Journal of Organizational Effectiveness: People and Performance, 6*(1), 19–38. doi:10.1108/JOEPP-06-2018-0034
- Sánchez-Cardona, I., Vera, M., Martínez-Lugo, M., Rodríguez-Montalbán, R., & Marrero-Centeno, J. (2020). When job does not fit: The moderating role of job crafting and meaningful work in the relationship of overqualification and job boredom. *Journal of Career Assessment, 28*(2), 257–276. doi:10.1177/1069072719857174
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*(3), 293–315. doi:10.1002/job.248
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A confirmative analytic approach. *Journal of Happiness Studies, 3*(1), 71–92. doi:10.1023/A:1015630930326
- Schaufeli, W. B., Shimazu, A., Hakanen, J., Salanova, M., & De Witte, H. (2019). An ultra-short measure for work engagement: The UWES-3 validation across five countries. *European Journal of Psychological Assessment, 35*(4), 577–591. doi:10.1027/1015-5759/a000430
- Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the job demands-resources model: Implications for improving work and health. In G. F. Bauer, & O. Hämmig (Eds.), *Bridging occupational, organizational and public health: A trans-disciplinary approach* (pp. 43–68). Zürich, Switzerland: Springer Science + Business.
- Schnell, T., Höge, T., & Pollet, E. (2013). Predicting meaning in work: Theory, data, implications. *The Journal of Positive Psychology, 8*(6), 543–554. doi:10.1080/17439760.2013.830763
- Shuck, B., Reio, T. G., & Rocco, T. S. (2011). Employee engagement: An examination of antecedent and outcome variables. *Human Resource Development International, 14*(4), 427–445. doi:10.1080/13678868.2011.601587
- Soane, E., Shantz, A., Alfes, K., Truss, C., Rees, C., & Gatenby, M. (2013). The association of meaningfulness, well-being, and engagement with absenteeism: A moderated mediation model. *Human Resource Management, 52*(3), 441–456. doi:10.1002/hrm.21534
- Sonnentag, S. (2017). A task-level perspective on work engagement: A new approach that helps to differentiate the concepts of engagement and burnout. *Burnout Research, 5*, 12–20. doi:10.1016/j.burn.2017.04.001
- Spector, P. E. (2019). Do not cross me: Optimizing the use of cross-sectional designs. *Journal of Business and Psychology, 34*(2), 125–137. doi:10.1007/s10869-018-09613-8
- Steffens, N. K., Yang, J., Jetten, J., Haslam, S. A., & Lipponen, J. (2018). The unfolding impact of leader identity entrepreneurship on burnout, work engagement, and turnover intentions. *Journal of Occupational Health Psychology, 23*(3), 373–387. doi:10.1037/ocp0000090
- Steger, M. F. (2017). Creating meaning and purpose at work. In L. G. Oades, M. F. Steger, A. Delle Fave, & J. Passmore (Eds.), *The Wiley Blackwell handbook of the psychology of positivity and strength based approaches at work* (pp. 60–81). Hoboken, NJ: John Wiley & Sons Ltd. doi:10.1002/9781118977620.ch5
- Steger, M. F., & Dik, B. J. (2010). Work as meaning: Individual and organizational benefits of engaging in meaningful work. In P.A. Linley, S. Harrington, & N. Garcea (Eds.), *Oxford handbook of positive psychology and work* (pp. 131–142). New York: Oxford University Press. doi:10.1093/oxfordhb/9780195335446.013.0011.
- Steger, M. F., Dik, B. J., & Duffy, R. D. (2012a). Measuring meaningful work: The work and meaning inventory (WAMI). *Journal of Career Assessment, 20*(3), 322–337. doi:10.1177/1069072711436160
- Steger, M. F., Littman-Ovadia, H., Miller, M., & Menger, L. (2013). Engaging in work even when it is meaningless: Positive affective disposition and meaningful work interact in relation to work engagement. *Journal of Career Assessment, 21*(2), 348–361. <https://doi.org/10.1177/1069072712471517>.
- Steger, M. F., Littman-Ovadia, H., Miller, M., Menger, L., & Rothmann, S. (2012b). Engaging in work even when it is meaningless: Positive affective disposition and meaningful work interact in relation to work engagement. *Journal of Career Assessment, 21*(2), 348–361. doi:10.1177/1069072712471517
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology, 46*(2), 259–293. doi:10.1111/j.1744-6570.1993.tb00874.x
- Tetteh, S. D., Osafo, J., Ansah-Nyarko, M., & Amponsah-Tawiah, K. (2019). Interpersonal fairness willingness-to-stay and organisation-based self-esteem: The mediating role of affective commitment. *Frontiers in Psychology, 10*, 1315. doi:10.3389/fpsyg.2019.01315
- Van den Broeck, A., Ferris, D. L., Chang, C.-H., & Rosen, C. C. (2016). A review of self-determination theory's basic psychological needs at work. *Journal of Management, 42*(5), 1195–1229. doi:10.1177/0149206316632058



- Van den Broeck, A., Schreurs, B., Guenter, H., & Van Emmerik, I. J. H. (2015). Skill utilization and well-being: A cross-level story of day-to-day fluctuations and personal intrinsic values. *Work and Stress*, 29(3), 306–323. doi:10.1080/02678373.2015.1074955
- Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work & Stress*, 22(3), 277–294. doi:10.1080/02678370802393672
- Van Veldhoven, M., Van den Broeck, A., Daniels, K., Bakker, A. B., Tavares, S. M., & Ogbonnaya, C. (2020). Challenging the universality of job resources: Why, when, and for whom are they beneficial? *Applied Psychology: An International Review*, 69(1), 5–29. doi:10.1111/apps.12211
- Wan, Q., Li, Z., Zhou, W., & Shang, S. (2018). Effects of work environment and job characteristics on the turnover intention of experience nurses: The mediating role of work engagement. *Journal of Advance Nursing*, 74(6), 1332–1341. doi:10.1111/jan.13528
- Weston, R., & Gore Jr P. A. (2006). A brief guide to structural equation modeling. *The Counseling Psychologist*, 34(5), 719–751. doi:10.1177/0011000006286345
- Work Institute (2018). 2018 Retention report truth & trends in turnover. [workinstitute.com/retentionreport2018](http://workinstitute.com/retentionreport2018).
- Wrzesniewski, A. (2003). Finding positive meaning in work. In K.S. Cameron, J.E. Dutton, & R.E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 296–308). San Francisco, CA: Berrett-Koehler.
- You-De, D., Wen-Long, Z., & Tzung-Chen, H. (2019). Engage or quit? The moderating role of abusive supervision between resilience, intention to leave, and work engagement. *Tourism Management*, 70, 69–77. doi:10.1016/j.tourman.2018.07.014

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