

# To be, or not to be in formalization: the relationship between HR practices and work engagement in the aviation industry

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## Abstract

**Purpose** – This study aims to examine the moderating role of formalization in the relationship between human resources (HR) practices and work engagement (WE) in aviation industry employees. The research revealed the moderator role of formalization, which is still one of the most critical components for aviation industry workers.

**Design/methodology/approach** – In the study, the authors used the survey method. In this explanatory and cross-sectional study, the authors examined a data set collected from aviation industry employees ( $n = 226$ ) in Turkey using the partial least squares (PLS) method and tried to moderate the formalization. The authors analyzed the moderator role of formalization in the relationship between HR practices and WE with SmartPLS 3.0 and HAYES Process Macro.

**Findings** – The results of the study explain the effect of HR practices on WE in the context of social exchange theory through formalization. Findings show that formalization is an essential factor in HR practices' resulting in higher WE.

**Research limitations/implications** – The study is cross-sectional. Research participants participated in the study voluntarily. This situation, in turn, may lead to a social desirability bias in participants' self-reported responses. To avoid this, the authors have prepared a standardized measurement tool. Again, since the authors do not request the names and institutions of the participants, confidentiality and anonymity are provided.

**Practical implications** – Research findings offer implications for companies and employees in developing economies, especially in the aviation sector. It refers to the necessity for companies aiming for a sustainable strategic position in the competitive aviation sector to attach importance to HR practices that will enable them to see their employees as a competitive advantage. In addition, the results emphasize the need for aviation industry companies to adopt an approach that considers both practices that can increase WE and formalization procedures that can affect employee behavior.

**Originality/value** – This research provides a comprehensive understanding to examine the interrelationships between HR, formalization and WE in the context of the mechanism of social change in the context of aviation industry workers. To the best of the authors' knowledge, no other researcher has holistically addressed these links in general, particularly in a developing country. The findings significantly enrich the literature on HR practices and WE, particularly in the context of a developing country.

**Keywords** Human resource practices, Work engagement, Formalization, Aviation industry

**Paper type** Research paper

## Introduction

The aviation industry is one of the keys to the global economy, but it is also at the center of world tourism and trade. According to international air transport association (IATA's) 2019 report, in the pre-Covid-19 period, \$850bn were obtained from passenger transportation in 2018. In addition, commercial cargo flights are increasing day by day. It has been stated that the value of the goods transported this way will exceed \$6.7tn. At the same

time, the aviation sector represents 33% of global trade (IATA, 2019). In a sector with excellent development potential, examining the possible effects of human resources (HR) practices on employees has become essential. To gain a competitive advantage and achieve their strategic goals, organizations in the aviation sector go through HR practices that provide high performance for qualified HR. These practices focus on employee attitudes and behaviors specified in Harvard and Guest's models (Boselie and Brewster, 2013; Guest, 1987). The relationship between work engagement (WE), which is one of the employee attitudes, and HR practices is examined within the framework of the social exchange theory (SET). According to

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Aircraft Engineering and Aerospace Technology  
96/3 (2024) 483–490  
© Emerald Publishing Limited [ISSN 1748-8842]  
[DOI 10.1108/AEAT-09-2023-0230]

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The authors received no financial support for the research.

Received 7 September 2023

Revised 26 February 2024

Accepted 26 February 2024

this theory, if the individual receives favor from the organization or another individual, he or she will want to reciprocate (Blau, 1964). In this framework, HR practices reflect an exchange relationship from the organization to the employee and from the employee to the organization (Miles, 2012).

Therefore, HR practices are vital in realizing activities that help achieve organizational goals (Raina and Kalse, 2019). According to Eisenberger *et al.* (2001), when employees feel obligated to the company, they contribute to it in return for their fair treatment (Sungu *et al.*, 2019). To demonstrate this contribution, employees increase their sense of belonging to the organization and their passion for their work (Ugwu and Okojie, 2017). Therefore, HR practices can be the precursor of WE. There are studies examining the effects of HR practices on WE (Bal and De Lange, 2015; Ahmed *et al.*, 2016; Sekhar *et al.*, 2018; Zhang *et al.*, 2018), training and development (Johari *et al.*, 2013; Aktar and Pangil, 2017; Chovarda, 2021; Damisa *et al.*, 2022), participation in decisions, compensation-benefits management (Khan and Khatoon, 2015; Vuong and Sid, 2020), performance appraisal (Bakalci, 2010; Raghavendra and Gouse, 2016), employee communication (Othman, 2011; Alzyoud, 2018), recruitment, performance management and career development (Chahar and Hatwal, 2018) have an impact on WE.

Especially in a sector such as the aviation industry where formalization is applied intensively, how these practices are reflected in the behavior of the employees has generally been ignored in the studies. In addition, as far as we know, there has yet to be a study examining the issue of formalization. On the other hand, the aviation sector, as a global sector with fierce competition and a volatile business environment, requires HR practices. Therefore, the study aims to ascertain how formalization influences HR practices and affects WE.

## Theoretical framework

### Literature review and hypothesis development

#### *Human resources practices.*

The importance of HR has become more understood in today's organizations. In particular, the domains of strategic management pay more attention to HR management practices (Easa and Orra, 2021). HR is seen as a critical success factor for putting policies and practices into place and enhancing long-term performance. In addition, top management is a source of competitive advantage for organizational performance to maintain its competitiveness in the market, together with the effective use of human and organizational resources (Mousa and Othman, 2020). Therefore, it is essential to find qualified HR to help organizations reach their strategic goals, retain them and make the most of their potential. In order to ensure the efficient operation and continued existence of the business, HR practices are defined as specific procedures, guidelines and philosophies (Tan and Nasuridin, 2011). In other words, HR practices are the managerial process of efforts, knowledge, skills and commitment-forming behaviors that contribute to achieving organizational goals as a part of the employment system (Vuong and Sid, 2020). Likewise, Snell *et al.* (2015) defined HRM practices as a philosophy that outlines how employees might be encouraged to fulfill the organization's goals, while Aktar and Pangil (2018) defined it as a policy or

system that influences employee attitudes and behaviors. On the other hand, Aboramadan *et al.* (2020) added job security, performance reviews, HR planning, teamwork, recruiting, training, rewarding and engagement to the list of key HRM activities.

The possible effects of HR practices on employees, which are also considered as the starting point of our study, have been elucidated through various models. For example, the Harvard Model included environmental factors, stakeholder interests and HR policies and procedures (Boselie and Brewster, 2013; Guest, 1987). On the other hand, Guest (1987) further developed the features of the Harvard model and evaluated the effects of different HR practices and HR policies in two categories: HR and organizational outcomes. The results for HR here are the attitudes and behaviors of the employee toward the job. Considering the production of this model for today's organizations, one of these attitudes is engagement in work. Schaufeli (2012) also emphasized the importance of HR practices in increasing work engagement and underlined the lack of research. Also, Urbini *et al.* (2021) state that HR practices can also improve WE levels.

#### *Work engagement.*

Work engagement is one of the popular topics in positive organizational behavior, which aims to increase employees' potential by focusing on their positive aspects. The literature first defined the concept of WE by Khan (1990). Khan (1990) defines WE as employees' commitment to their job roles and states that employees dedicate themselves cognitively, emotionally and physically to perform their functions. Schaufeli *et al.* (2002), on the other hand, define WE as a work-related mental state framed by *vigor, dedication and absorption*. At the same time, WE express a positive, satisfying, emotional and motivational state about work (Leiter and Bakker, 2010).

Some studies examine the impact of HR practices on WE in a theoretical framework (Saks, 2021; Ahmed *et al.*, 2016; Schaufeli and Salanova, 2008), while in other studies, this effect has been empirically addressed (Sivapragasam and Raya, 2018; Chahar and Hatwal, 2018; Alzyoud, 2018; Huang *et al.*, 2018; Zhang *et al.*, 2018; Aktar and Islam, 2019; Vuong and Sid, 2020; Urbini *et al.*, 2021; Pham, 2021; Van Beurden *et al.*, 2021; He *et al.*, 2021; Jarrar, 2022). Investigating the connection between employee attitudes, mainly WE, and HR practices is essential. Accordingly;

*H1.* HR practices are positively related to WE.

#### *Formalization as a moderator.*

Formalization refers to how organizational activities are standardized and how employee behavior is guided by procedures and rules (Robbins and Coulter, 2016). At the same time, formalization encompasses all the principles and practices regarding where, how and by whom organizational tasks are to be carried out (Ford and Slocum, 1977; Pugh *et al.*, 1968). On the other hand, Morris and Steers (1980) stated that formalization is related to employees' contributions.

The roots of formalization are based on Weber's theory of bureaucracy. This concept has long been a frequent focus of theoretical and empirical research in the organizational behavior and management literature. In these studies,

formalization has been identified with administrative bureaucracy. In addition, Blau (1956) mentions formal procedures, regulations and rules related to the characteristics of the organizational structure for formalization. From the HR management perspective, procedures and rules may be beneficial for formalizing and developing relevant practices (Ganesh and Joseph, 2011).

In the studies conducted, it is seen that results show the different positive and negative effects of formalization on employees. The results of studies conducted in various sectors and samples support this. For example, a study of 136 full-time employees working in different institutions showed that WE play a role in the relationship between formalization and performance in the workplace. According to this study, while the level of centralization is lower, the relationship between formalization and the employee’s success in the workplace is higher (Rahaman, 2022). Another study by Belsito and Reutzler (2020) examined the effects of formalization in performance evaluation systems on SME employees and concluded that formalization reduces employees’ intention to leave. Bilici (2019)’s study shows that the level of formalization in HR training, job analysis and performance management affects employees’ motivations shows a positive effect. However, in the study, the level of formalization in career management and job selection and placement practices does not affect motivation. For this reason, it is possible to discuss the different effects of formalization. We sought to quantify the formalization’s moderating influence on the relationship between WE and HR practices based on studies from the literature. On the other hand, another study on global teams highlighted that only formalization processes that encourage knowledge sharing effectively increase team effectiveness. This study also noted the adverse effects of formalization on employee relationships (Gibson et al., 2019). Based on the studies in the literature, we believe that formalization will play a moderator role between HR practices and WE. The hypothesis and research model (Figure 1) we have formulated for this purpose is as follows:

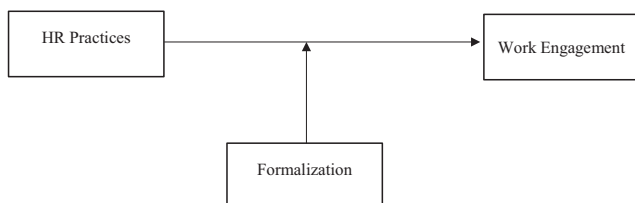
H2. Formalization has a moderator role in the relationship between HR practices and work engagement.

## Methodology

### Sample and procedure

Data were collected by questionnaire method from aviation industry employees in Turkey. Both private and government employees in the aviation sector participated in the survey ( $n =$

Figure 1 Research model



Source: Prepared by authors

226). The survey was shared via the Google Form link. In addition, participants participated in the research through convenience sampling. Most respondents are male (% 65), between 24 and 35 years of age (%66) and highly educated (% 87 – undergraduate and postgraduate degrees).

### Instruments

There are three scales in total in the questionnaire form. The scales are detailed below.

*HR practices scale:* This relied on Uslu’s (2019) scale in her study. This scale was prepared by considering the HR practices in the scale used by Aybas (2014) and Gürbüz and Bekmezci (2012). There are examples of expressions: “In the company I work for, long-term retention of employees is emphasized;” “The company I work for attaches great importance to the recruitment process.”

*WE scale:* This scale was developed by Schaufeli et al. (2006). The validity and reliability study of this scale in Turkish and its three-expression ultrashort version (UWES-3) were developed by Güler et al. (2019). There are examples of items, “I am enthusiastic about my work;” “I immerse myself in my work.”

*Formalization scale:* The formalization scale, which is the subscale of the Institutionalization Principles Scale in Öztürk’s (2014) study, was used. There are examples of items “Our company has an information booklet for employees on issues such as safety and working conditions;” “Our company has written operation instructions for employees.”

The HR practices and formalization scales are evaluated on a five-point, and the WE scale’s expressions were evaluated using a six-point Likert scale.

### Measure validity and reliability.

To analyze the validity and reliability of our constructs in the research model, we used confirmatory factor analysis with the main assumptions determined by Fornell and Larcker (1981) and Anderson and Gerbing (1988). Using AMOS 24.0 data from survey participants ( $n = 226$ ), we comprehensively analyzed 36 scale items, including three key variables, in a single confirmatory factor analysis (CFA) model.

We observed that three items from the HR scale exhibited some degree of cross loading on other factors. Upon examining these items, we determined that their removal would maintain the content validity of the HR practices. Consequently, we decided to exclude these three HR practice items. After eliminating those items, the resulting measurement model demonstrated a good fit with the data. These fit values are as follows:  $\chi^2(549) = 1,141.11$ , comparative fit index (CFI) = 0.89, incremental fit index (IFI) = 0.90, Tucker–Lewis Index (TLI) = 0.91 and root-mean-square error of approximation (RMSEA) = 0.07. Furthermore, the PNFI yielded a value of 0.75, exceeding the cutoff point of 0.70. In addition, we followed the procedure that Segars (1997) proposed to detect convergent validity. In this procedure, item loadings with  $t$ -values exceeding  $|2.0|$  are considered statistically significant at 0.05. As indicated in Table 1, the results provided evidence of convergent validity.

Table 2 lists the reliability estimates for the reflective measures with many items, including construct correlations, average variance extracted for each construct and composite reliabilities based on AMOS 24.0. Table 2 shows that all

Table 1 Measurement models and confirmatory factor analysis

Construct	Parameter <sup>a</sup>	Standardized coefficient	z-score <sup>b</sup>
Formalization	$I_{F1}$	0.76	Scaling
	$k_{F2}$	0.89	14.74
	$k_{F3}$	0.93	15.30
	$k_{F4}$	0.78	12.57
Work engagement	$I_{WE1}$	0.82	Scaling
	$k_{WE2}$	0.87	13.42
	$k_{WE3}$	0.77	12.28
HR practices	$I_{HR1}$	0.57	Scaling
	$k_{HE2}$	0.70	8.43
	$k_{HR3}$	0.69	8.34
	$k_{HR4}$	0.67	2.66
	$k_{HR5}$	0.65	8.03
	$k_{HR6}$	0.69	8.39
	$k_{HR7}$	0.70	8.48
	$k_{HR8}$	0.53	6.94
	$k_{HR9}$	0.78	9.02
	$k_{HR11}$	0.82	9.32
	$k_{HR12}$	0.88	9.71
	$k_{HR13}$	0.85	9.54
	$k_{HR14}$	0.81	9.27
	$k_{HR15}$	0.86	9.59
	$k_{HR16}$	0.72	8.59
	$k_{HR17}$	0.58	7.43
	$k_{HR18}$	0.53	6.93
	$k_{HR20}$	0.76	8.91
	$k_{hr21}$	0.78	9.05
	$k_{HR22}$	0.82	9.29
	$k_{HR23}$	0.62	7.74
	$k_{HR24}$	0.59	7.54
	$k_{HR26}$	0.60	7.61
	$k_{HR27}$	0.64	7.92
	$k_{HR28}$	0.60	7.62

Notes:  $\chi^2(549) = 1,141.11$ , CFI = 0.89, IFI = 0.90, TLI = 0.91, RMSEA = 0.07; F = formalization, WE = work engagement, HR = HR practices, <sup>a</sup>/ parameters indicate paths from measurement items to first-order constructs; <sup>b</sup>scaling denotes / value of indicator set to one to enable latent factor identification

Source: Prepared by authors

Table 2 Reliability estimates and correlations

Number of variables	Variables	1	2	3
1	HR practices	0.88		
2	Work engagement	0.49**	0.71	
3	Formalization	0.31**	0.36**	0.88
	Composite reliability	0.91	0.96	0.86
	Average variance extracted	0.78	0.51	0.78
	Cronbach's $\alpha$	0.93	0.96	0.91

Notes: \* $p < 0.05$ ; \*\* $p < 0.01$

Source: Prepared by authors

dependability estimates are higher than the cutoff points proposed by Hair et al. (2010), Fornell and Larcker (1981) and Nunnally (1978). Furthermore, the square root of the average variance recovered for each construct also outperformed the

Table 3 Regression analysis

Model	$\beta$	S.D.	t	p
Constant	-0.072	0.071	-1.006	0.315
HR practices (X)	0.183*	0.082	2.223	0.027*
Formalization (W)	0.172*	0.077	2.239	0.026*
X*W	0.131*	0.049	2.672	0.008**
$X^*W: R^2\text{-change} = 0.0279 F = 7.13 p = 0.0081$				

Notes: \* $p < 0.05$ ; \*\* $p < 0.01$   
Source: Prepared by authors

correlations between construct pairs in Table 2 as a test for discriminant validity. These tests led us to the conclusion that our measurements have adequate convergent and discriminant validity.

**Common method biases**

Our study is susceptible to common method bias because the same submit submitted cross-sectional replies for the dependent and independent variables. This potential problem was explored using the Harman single-factor test (Podsakoff and Organ, 1986). The threshold value of 0.5 in the Harman single factor test. This value is used to compare the variance rate for the factor with the highest eigenvalue (Kock, 2021). Principal component analysis explained 58.43% of the total variance with eigenvalues greater than 1, proving that the common method variance was not a concern. As a result, the proposed model is not affected by common method bias.

**Hypothesis testing**

We followed the procedures Preacher et al. (2007) recommended and used PROCESS 4.0, developed by Hayes (2017). To obtain the 95% confidence interval of indirect effects, 5,000 bootstrap resamples were selected. We created a model that included HR practices as a predictor (X), formalization as a moderator (W) and work engagement as the criterion variable (Y). The direct relationships are shown in Table 3. According to the results, the given regression model explains the 13% of the variance ( $R^2 = 0.13$ ) in work engagement (model summary:  $R = 0.3641$ ,  $R^2 = 0.1326$ ,  $F = 11.3105$ ,  $p = 0.000$ ). Table 3 shows that HR practices have a significant, positive relationship with WE ( $\beta = 0.18$ ,  $p < 0.05$ ), supporting H1. Furthermore, the findings show that formalization significantly and positively moderated the relationship between HR practices and WE ( $\beta = 0.13$ ,  $p < 0.01$ ), supporting H2.

**Conclusion and recommendations**

As we discussed earlier, priorities in the aviation industry are often set by formalized guidelines such as norms and procedures. With this study, we want to understand better how HR practices affect employee behavior in an industry such as aviation, where formalization is heavily applied. In addition, organizational structures are shaped by formalization and affect employee behavior. In our study, as in another study (Hong and Furnell, 2022), formalization was measured at the employee's perception level. In parallel with previous studies, our study also stated a positive relationship between HR practices and WE (Ahmed et al., 2020).

This model gives a convenient means for firms to develop more formal organizations and better levels of employee involvement, given the potential for WE to give organizations a competitive advantage. This study also contributes significantly to the body of knowledge on HR practices, WE and formalization due to the need for more research in this area. HR experts can use the findings from this study to enhance their current WE strategies, policies and procedures.

Our study's findings highlight the relevance of formalization in the aviation industry and its effects on behavior and WE. Organizations may establish an engaging and organized work environment that fosters safety and efficiency by implementing successful formalization strategies. This study adds to our understanding of HR, workplace engagement and formalization and offers valuable information to academics and practitioners in the aviation industry and beyond.

### Theoretical and practical implications

Our research findings regarding the benefits of HR practices on WE further support the SET perspective in demonstrating the mechanism of social exchange within organizations. Specifically, we have shown that HR practices significantly affect WE. This result is in line with the SET perspective, which suggests that employers should strive for high levels of WE. Furthermore, it underscores employers' importance in developing well-structured HR policies (Alzyoud, 2018). In the literature, it is evident that HR practices such as recruitment and training positively influence WE (Alola and Alafeshat, 2021), which aligns with the findings in the study by Bernt (2016). It has been noted that HR selection and training practices affect WE, leading to increased individual performance. Studies by Arefin *et al.* (2019) and Ahmed *et al.* (2020) have also found a relationship between HR practices and WE.

In the aviation sector, there needs to be more understanding of the level of formalization concerning the impact of HR practices on WE. Further research is needed to comprehend formalization's role in this relationship better. Dastmalchian and Blyton (1992) explained the role of formalization in HR practices and union relations. Formalization implied adherence to procedural processes and led to inflexible methods, which prompted unions to engage in strike activities. In this context, formalization was seen as having a negative outcome. HR policymakers should strive to improve existing strategies and systems related to WE (Park *et al.*, 2019).

These research findings offer implications, especially for firms and employees in the aviation sector in developing economies. Firms in the competitive aviation industry aiming for a sustainable strategic position should consider employees a competitive advantage and pay attention to the potential effects of formalization. In light of our findings, formalization is critical in an environment where competitive factors change rapidly. Mainly, aviation sector firms should adopt an approach that considers both practices that can increase work engagement and formalization procedures that can affect employee behavior.

### Limitations

As in every study, we have some limitations regarding the research while interpreting our results. First, the research is

cross-sectional, as it reflects the situation during a certain period. Secondly, it should be noted that the research results are limited to the sample only and cannot be generalized. Finally, our study has self-reported responses may lead to social desirability bias. In this direction, the participant's reactions to the HR practices and formalization variables could be measured at the perceptual level.

On the other hand, WE is for the determination of attitudes. In addition, we have prepared a standardized measurement tool to reduce the potential bias of employees. Again, confidentiality and anonymity were ensured since we did not request the participants' names and institutions (Podsakoff *et al.*, 2003).

### References

- Aboramadan, M., Albashiti, B., Alharazin, H. and Dahleez, K. A. (2020), "Human resources management practices and organizational commitment in higher education: the mediating role of work engagement", *International Journal of Educational Management*, Vol. 34 No. 1, pp. 154-174.
- Ahmed, U., Majid, A.H.A. and Zin, M.L.M. (2016), "HR moderating HR: critical link between developmental HR practices and work engagement in a moderated model", *Management Review: An International Journal*, Vol. 11 No. 2, p. 422.
- Ahmed, U., Kura, K.M., Umrani, W.A. and Pahi, M.H. (2020), "Modelling the link between developmental human resource practices and work engagement: the moderation role of service climate", *Global Business Review*, Vol. 21 No. 1, pp. 31-53.
- Aktar, A. and Pangil, F. (2017), "The relationship between employee engagement, HRM practices and perceived organizational support: evidence from banking employees", *International Journal of Human Resource Studies*, Vol. 7 No. 3.
- Aktar, A. and Pangil, F. (2018), "Mediating role of organizational commitment in the relationship between human resource management practices and employee engagement: does black box stage exist?", *International Journal of Sociology and Social Policy*, Vol. 38 No. 7-8, pp. 606-636.
- Aktar, A. and Islam, Y. (2019), "Green human resource management practices and employee engagement: empirical evidence from RMG sector in Bangladesh", available at: [SSRN 3363860](https://ssrn.com/abstract=3363860)
- Alola, U.V. and Alafeshat, R. (2021), "The impact of human resource practices on employee engagement in the airline industry", *Journal of Public Affairs*, Vol. 21 No. 1, p. e2135.
- Alzyoud, A.A.Y. (2018), "The influence of human resource management practices on employee work engagement", *Foundations of Management*, Vol. 10 No. 1, pp. 251-256.
- Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423.
- Arefin, M.S., Alam, M.S., Islam, M.R. and Rahaman, M. (2019), "High-performance work systems and job engagement: the mediating role of psychological empowerment", *Cogent Business and Management*, Vol. 6 No. 1, pp. 1-17.

- Aybas, M. (2014), "İnsan kaynakları uygulamalarının çalışanların işe adanmışlığı üzerindeki etkisi ve pozitif psikolojik sermayenin aracı rolü, konuya ilişkin bir araştırma (The effect of human resources practices on employee engagement and the mediating role of positive psychological capital, a research on the subject)", Unpublished Doctoral Thesis. İstanbul University, İstanbul.
- Bakalçı, H. (2010), "İşe gönülden adanma ve insan kaynakları yönetimi uygulamaları arasındaki ilişki ve bir örnek olay", Unpublished Master's Thesis, Bahçeşehir University Institute of Social Sciences, İstanbul.
- Bal, P.M. and De Lange, A.H. (2015), "From flexibility human resource management to employee engagement and perceived job performance across the lifespan: a multisample study", *Journal of Occupational and Organizational Psychology*, Vol. 88 No. 1, pp. 126-154.
- Belsito, C.A. and Reutzler, C.R. (2020), "SME employee performance appraisal formalization and trust in leadership change", *International Journal of Organizational Analysis*, Vol. 28 No. 2, pp. 434-456.
- Bernt, P.E.H. (2016), "Work engagement as a mediator in the relationship between HRM-practices and employee performance", Unpublished Master thesis.
- Bilici, E.E. (2019), "İnsan kaynakları sistemlerindeki formalleşme düzeyinin çalışan motivasyonu ve işten ayrılma niyeti üzerindeki etkileri: Bir telekomünikasyon firmasında araştırma (The effects of formalization level in human resources systems on employee motivation and turnover intention: a research in a telecommunications company)", Unpublished Master thesis, Bursa Uludağ Üniversitesi.
- Blau, P. (1956), *Bureaucracy in Modern Society*, New York, NY.
- Blau, P.M. (1964), *Exchange and Power in Social Life*, John Wiley and Sons, New York, NY.
- Boselie, P. and Brewster, C. (2013), "At the crossroads at midnight: strategic human resource management now", John H. Dunning Centre for International Business (Ed.), Discussion Paper Series.
- Chahar, B. and Hatwal, V. (2018), "Human resource management practices and its impact on employees engagement and performance", *OPUS: HR Journal*, Vol. 9 No. 1, pp. 16-35.
- Chovarda, M. (2021), "The impact of training and development on work engagement: a study in the banking sector", Unpublished master thesis.
- Damisa, A.S., Zainol. and F.A., Bin. (2022), "The impact of organizational culture, career development and training on employee engagement in Nigeria manufacturing firms: a conceptual framework", *International Journal of Academic Research in Economics and Management and Sciences*, Vol. 11 No. 2, pp. 293-306.
- Dastmalchian, A. and Blyton, P. (1992), "Organizational structure, human resource practices and industrial relations", *Personnel Review*, Vol. 21 No. 1, pp. 58-67.
- Easa, N.F. and Orra, H.E. (2021), "HRM practices and innovation: an empirical systematic review", *International Journal of Disruptive Innovation in Government*, Vol. 1 No. 1, pp. 15-35.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P.D. and Rhoades, L. (2001), "Reciprocation of perceived organizational support", *Journal of Applied Psychology*, Vol. 86 No. 1, pp. 42-51.
- Ford, J.D. and Slocum, J.W. Jr (1977), "Size, technology, environment and the structure of organizations", *The Academy of Management Review*, Vol. 2 No. 4, pp. 561-575.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
- Ganesh, S.S. and Joseph, J. (2011), "Exploring perceived organisational formalisation and performance review system complexity as predictors of executive alienation in performance review systems", *IIMB Management Review*, Vol. 23 No. 4, pp. 197-207.
- Gibson, C.B., Dunlop, P.D. and Cordery, J.L. (2019), "Managing formalization to increase global team effectiveness and meaningfulness of work in multinational organizations", *Journal of International Business Studies*, Vol. 50 No. 6, pp. 1021-1052.
- Guest, D.E. (1987), "Human resource management and industrial relations", *Journal of Management Studies*, Vol. 24 No. 5, pp. 503-521.
- Güler, M., Çetin, F. and Basım, H.N. (2019), "İşe tutulma ölçeği çok kısa versiyonu (UWES-3) geçerlilik ve güvenilirlik çalışması: alternatif bir versiyon (UWES-6) önerisi", *İş Ve İnsan Dergisi*, Vol. 6 No. 2, pp. 187-195.
- Gürbüz, S. and Bekmezci, M. (2012), "İnsan kaynakları yönetimi uygulamalarının bilgi işçilerinin işten ayrılma niyetine etkisinde duygusal bağlılığın aracılık ve düzenleyicilik rolü (The mediating and moderating role of emotional commitment in the effect of human resource management practices on knowledge workers' turnover intention)", *İstanbul University Journal of the School of Business Administration*, Vol. 41 No. 2, pp. 189-213.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010), *Multivariate Data Analysis: International Version*, Pearson, NJ, US.
- Hayes, A.F. (2017), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, Guilford Publications.
- He, J., Morrison, A.M. and Zhang, H. (2021), "How high-performance HR practices and LMX affect employee engagement and creativity in hospitality", *Journal of Hospitality and Tourism Research*, Vol. 45 No. 8, pp. 1360-1382.
- Hong, Y. and Furnell, S. (2022), "Motivating information security policy compliance: insights from perceived organizational formalization", *Journal of Computer Information Systems*, Vol. 62 No. 1, pp. 19-28.
- Huang, Y., Ma, Z. and Meng, Y. (2018), "High-performance work systems and employee engagement: empirical evidence from China", *Asia Pacific Journal of Human Resources*, Vol. 56 No. 3, pp. 341-359.
- IATA (2019), "Annual review", available at: [IATA-annual-review-2019.pdf](#)
- Jarrar, A.S. (2022), "Strategic human resource practices and employee's engagement: evidence from Jordanian commercial banks", *European Journal of Business and Management Research*, Vol. 7 No. 1, pp. 66-72.

- Johari, J., Adnan, Z., Yean, T.F., Yahya, K.K. and Isa, S.N. (2013), "Fostering employee engagement through human resource practices: a case of manufacturing firms in Malaysia", *Jurnal Pengurusan*, Vol. 38, pp. 15-26.
- Khan, W.A. (1990), "Psychological conditions of personal engagement and disengagement at work", *Academy of Management Journal*, Vol. 33 No. 4, pp. 692-724.
- Khan, A.H. and Khatoon, R. (2015), "Impact of core HR practices on employee engagement", *International Journal of Management Sciences and Business Research*, Vol. 4 No. 9, pp. 68-73.
- Kock, N. (2021), "Harman's single factor test in PLS-SEM: checking for common method bias", *Data Analysis Perspectives Journal*, Vol. 2 No. 2, pp. 1-6.
- Leiter, M.P. and Bakker, A.B. (2010), "Work engagement: introduction", *Work Engagement: A Handbook of Essential Theory and Research*, pp. 1-9.
- Miles, J.A. (2012), *Management and Organization Theory: A Jossey-Bass Reader*, Vol. 9, John Wiley and Sons, NJ.
- Morris, J.H. and Steers, R.M. (1980), "Structural influences on organizational commitment", *Journal of Vocational Behavior*, Vol. 17 No. 1, pp. 50-57.
- Mousa, S.K. and Othman, M. (2020), "The impact of green human resource management practices on sustainable performance in healthcare organisations: a conceptual framework", *Journal of Cleaner Production*, Vol. 243, p. 118595.
- Nunnally, J.C. (1978), "An overview of psychological measurement", *Clinical Diagnosis of Mental Disorders: A Handbook*, pp. 97-146.
- Othman, R.B. (2011), "The influence of human resource practices on employee work engagement", Doctoral dissertation, Universiti Utara Malaysia.
- Öztürk, P. (2014), "Sağlık kurumlarının kurumsallaşmasının kurum performansı üzerindeki etkisi (The effect of institutionalization of health institutions on institution performance)", Unpublished Doctoral Thesis.
- Park, S., Johnson, K.R. and Chaudhuri, S. (2019), "Promoting work engagement in the hotel sector: review and analysis", *Management Research Review*, Vol. 42 No. 8, pp. 971-990.
- Pham, T.N.M. (2021), "The relationship between human resource management practices, work engagement and employee behavior: a case study in vietnam", *The Journal of Asian Finance, Economics and Business*, Vol. 8 No. 4, pp. 1003-1012.
- Podsakoff, P.M. and Organ, D.W. (1986), "Self-reports in organizational research: problems and prospects", *Journal of Management*, Vol. 12 No. 4, pp. 531-544.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N. P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, p. 879.
- Preacher, K.J., Rucker, D.D. and Hayes, A.F. (2007), "Addressing moderated mediation hypotheses: theory, methods, and prescriptions", *Multivariate Behavioral Research*, Vol. 42 No. 1, pp. 185-227.
- Pugh, D.S., Hickson, D.J., Hinings, C.R. and Turner, C. (1968), "Dimensions of organization structure", *Administrative Science Quarterly*, Vol. 13 No. 1, pp. 65-105.
- Raghavendra, B. and Gouse, S.M. (2016), "Influence of HR practices on employee engagement", *International Journal in Management and Social Science*, Vol. 4 No. 6, pp. 637-645.
- Rahaman, H.M.S. (2022), "Formalization and employee thriving at work: a moderated mediation model including work engagement and centralization", *Personnel Review*, Vol. 51 No. 9, doi: [10.1108/PR-03-2021-0223](https://doi.org/10.1108/PR-03-2021-0223).
- Raina, B. and Kalse, A.A. (2019), "Study of employee's perception of human resource practices and work engagement in hospitality industry (Mumbai)", *International Journal of Scientific and Technology Research*, Vol. 8 No. 10, pp. 306-313.
- Robbins, S.P. and Coulter, M. (2016), "Management", 13th global edition Pearson Education, Essex.
- Saks, A.M. (2021), "Caring human resources management and employee engagement", *Human Resource Management Review*, Vol. 32 No. 3.
- Schaufeli, W. (2012), "Work engagement: what do we know and where do we go?", *Romanian Journal of Applied Psychology*, Vol. 14 No. 1, pp. 3-10.
- Schaufeli, W.B. and Salanova, M. (2008), "Enhancing work engagement through the management of human resources", The individual in the changing working life, pp. 380-402, available at: [www.wilmarschaufeli.nl/publications/Schaufeli/293.pdf](http://www.wilmarschaufeli.nl/publications/Schaufeli/293.pdf)
- Schaufeli, W.B., Salanova, M., Gonzalez-Roma, V. and Bakker, A.B. (2002), "The measurement of engagement and burnout: a two sample confirmatory factor analytic approach", *Journal of Happiness Studies*, Vol. 3 No. 1, pp. 71-92.
- Schaufeli, W.B., Bakker, A.B. and Salanova, M. (2006), "The measurement of work engagement with a short questionnaire: a cross-national study", *Educational and Psychological Measurement*, Vol. 66 No. 4, pp. 701-716.
- Segars, A. (1997), "Assessing the unidimensionality of measurement: a paradigm and illustration within the context of information systems research", *Omega*, Vol. 25 No. 1, pp. 107-121.
- Sekhar, C., Patwardhan, M. and Vyas, V. (2018), "Linking work engagement to job performance through flexible human resource management", *Advances in Developing Human Resources*, Vol. 20 No. 1, pp. 72-87.
- Sivapragasam, P. and Raya, R.P. (2018), "HRM and employee engagement link: mediating role of employee well-being", *Global Business Review*, Vol. 19 No. 1, pp. 147-161.
- Snell, S., Morris, S. and Bohlander, G.W. (2015), *Managing Human Resources*, Cengage Learning, Boston, MA.
- Sungu, L.J., Weng, Q. and Kitule, J.A. (2019), "When organizational support yields both performance and satisfaction: the role of performance ability in the lens of social exchange theory", *Personnel Review*, Vol. 48 No. 6, pp. 1410-1428.
- Tan, C.L. and Nasurdin, A.M. (2011), "Human resource management practices and organizational innovation: assessing the mediating role of knowledge management effectiveness", *Electronic Journal of Knowledge Management*, Vol. 9 No. 2, pp. 155-167.
- Ugwu, C.C. and Okojie, J.O. (2017), "Human resource management (HRM) practices and work engagement in Nigeria: the mediating role of psychological capital (PSYCAP)", *International Journal of Social Sciences and Humanities Review*, Vol. 6 No. 4, pp. 71-87.

- Urbini, F., Chirumbolo, A., Giorgi, G., Caracuzzo, E. and Callea, A. (2021), "HRM practices and work engagement relationship: differences Concerning individual adaptability", *Sustainability*, Vol. 13 No. 19, p. 10666.
- Uslu, M. (2019), "İnsan kaynakları uygulamalarının örgütsel bağlılığa etkisi ve kuşaklara göre incelenmesi (The effect of human resources practices on organizational commitment and analysis according to generations)", Unpublished Master Thesis, Yıldız Technical University.
- Van Beurden, J., Van Veldhoven, M. and Van De Voorde, K. (2021), "How employee perceptions of HR practices in schools relate to employee work engagement and job performance", *Journal of Management and Organization*, pp. 1-19.

- Vuong, B. and Sid, S. (2020), "The impact of human resource management practices on employee engagement and moderating role of gender and marital status: an evidence from the vietnamese banking industry", *Management Science Letters*, Vol. 10 No. 7, pp. 1633-1648.
- Zhang, L., Zhang, Y., Dallas, M., Xu, S. and Hu, J. (2018), "How perceived empowerment HR practices influence work engagement in social enterprises – a moderated mediation model", *The International Journal of Human Resource Management*, Vol. 29 No. 20, pp. 2971-2999.

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