

High-performance work systems and employee voice behavior: a sequential mediation analysis

Sami A. Abou-Al-Ross

Department of Management, Islamic University of Gaza, Gaza, Palestinian Authority

Ahmad Abualigah

College of Business, Abu Dhabi University, Abu Dhabi, United Arab Emirates

Julia Barbar

School of Economics, Administration and Public Policy,

Doha Institute for Graduate Studies, Doha, Qatar

Yasir Mansoor Kundi

Department of Management, School of Business Studies,

Institute of Business Administration Karachi, Karachi, Pakistan, and

Khalid Abed Dahleez

College of Business Administration, A'Sharqiyah University, Ibra, Oman

Abstract

Purpose – Based on ability-motivation-opportunity, social exchange, and job demands-resources theories, this research aims to investigate how high-performance work systems (HPWS) are linked to voice behavior through sequential mediating effects of psychological meaningfulness and work engagement in a Middle Eastern context.

Design/methodology/approach – Structural equation modeling was employed to analyze data obtained from a sample of 538 nurses working in various hospitals located in Palestine.

Findings – The findings show a positive association between HPWS and voice behavior. In addition, the study findings support the sequential mediation of psychological meaningfulness and work engagement on the association between HPWS and voice behavior.

Originality/value – This study is one of the few examining the effect of HPWS on individual-level outcomes in the context of the Middle East. More specifically, our study is the first to test the association between HPWS and voice behavior, especially in this under-researched context. It is also the first to explore the influence of HPWS on voice behavior through sequential mediating pathways of psychological meaningfulness and work engagement.

Keywords Employee voice behavior, High-performance work systems (HPWS), Psychological meaningfulness, Work engagement

Paper type Research paper

1. Introduction

In the field of human resource management, scholars have explored the potential advantages of utilizing “high-performance work systems” (HPWS) as a strategy for enhancing firms’ competitive advantage (Boxall and Macky, 2009; Wang *et al.*, 2022; Wright and Boswell, 2002). HPWS refer to “systems of human resource practices designed to enhance employee’s skills, commitment and productivity in such a way that employees become a source of competitive advantage” (Datta *et al.*, 2005, p. 135). HPWS consist of a bundle of interrelated practices that incorporate recruitment and selection, training, performance appraisal, involvement in decision-making, compensation, and job security (Huselid, 1995; Wright *et al.*, 2003). These human resource (HR) practices are anticipated to help improve organizational performance if they function as a system (Dimple and Kuriakose, 2023; Kloutsiniotis and Mihail, 2020a).



Prior studies have mostly concentrated on exploring the HPWS–organizational performance linkage (e.g. [Obeidat et al., 2016](#); [Shin and Konrad, 2017](#); [Zhang and Morris, 2014](#)). There is also an increasing interest in examining the influence of HPWS on individual-level outcomes ([Dorta-Afonso et al., 2023](#); [Miao et al., 2021](#); [Xiong, 2023](#)). For instance, [Dorta-Afonso et al. \(2023\)](#) suggested that HPWS positively influenced job satisfaction. [Xiong \(2023\)](#) suggested a positive association between HPWS and work engagement. Furthermore, [Miao et al. \(2021\)](#) reported that HPWS positively related to employee affective commitment.

Even though studies have demonstrated the impact of HPWS on a range of outcomes, the majority of studies in the HPWS literature are conducted in manufacturing organizations ([Kloutsiniotis and Mihail, 2020b](#)). Thus, research is needed to explore HPWS in the service sector ([Dimple and Kuriakose, 2023](#)). In addition, most HPWS studies have been carried out in Western settings ([Cooke et al., 2020](#)). However, barring a few exceptions (e.g. [Aboramadan, 2022](#)), research on the effect of HPWS in the context of the Middle East remains relatively silent. Furthermore, recent research has highlighted the need to investigate employee voice in the Middle Eastern region ([Melhem and Darwish, 2023](#)). Employee voice behavior is defined as a behavior that is characterized by “constructive, change-oriented communication intended to improve the situation” ([LePine and Van Dyne, 2001](#), p. 326). It can also be seen as an upward, proactive, and improvement-focused form of communication that employees display at work ([Kundi et al., 2023](#); [Ng and Feldman, 2012](#)). In addition, organizations nowadays rely on the opinions and ideas of their staff members in order to improve their performance and enhance customer satisfaction ([Bai et al., 2019](#); [Ehrnrooth et al., 2023](#)). However, when staff members do not share their concerns about work-related issues, organizations may deny potential opportunities to identify, address, and prevent persistent problems at work ([Morrison, 2023](#); [Tedone and Bruk-Lee, 2022](#)). In light of this, it is essential for organizations to create an atmosphere where staff members can enhance their skills, knowledge, and abilities and motivate them to express their opinions ([Badru et al., 2022](#)). Therefore, guided by the ability-motivation-opportunity (AMO) theory ([Appelbaum, 2000](#)), we examine the relationship between HPWS and employee voice behavior.

Moreover, although scholarly efforts have enhanced our understanding of HPWS, recent studies have emphasized the importance of exploring the process “black box” through which HPWS generate positive work outcomes ([Conteh and Yuan, 2022](#); [Dimple and Kuriakose, 2023](#); [Karadas and Karatepe, 2019](#); [Kaushik and Mukherjee, 2022](#); [Kloutsiniotis and Mihail, 2020b](#)). More specifically, there is a necessity to examine the underlying mechanisms in the HPWS–voice behavior linkage ([Badru et al., 2022](#); [Doshi and Nigam, 2023](#); [Mowbray et al., 2021](#)). Thus, building on the job demands-resources (JD-R) ([Bakker and Demerouti, 2017](#)) and social exchange ([Blau, 1964](#)) theories, we examine sequential mediators of psychological meaningfulness and work engagement in the HPWS–employee voice behavior relationship.

In a nutshell, this research proposes a model through which psychological meaningfulness and work engagement sequentially mediate the link between HPWS and voice behavior. In particular, we examine the influence of HPWS on voice behavior, psychological meaningfulness as a mediator of the effect of HPWS on voice behavior, and work engagement as a mediator between HPWS and voice behavior. Finally, our study investigates the sequential mediation of psychological meaningfulness and work engagement on the effect of HPWS on voice behavior.

Considering the aforementioned discussion, our study contributes to the existing literature as follows. First, it responds to recent calls to examine the nexus between HPWS and voice behavior ([Mowbray et al., 2021](#)), particularly in the service sector ([Dimple and Kuriakose, 2023](#)). Second, our study examines the aforesaid linkages in the Middle Eastern context, thus addressing recent calls ([Aboramadan, 2022](#); [Melhem and Darwish, 2023](#)) for more research in such a context ([Abualigah et al., 2023](#)). Along similar lines, [Jewell et al. \(2022\)](#) highlight the need for further field-level practical study to examine the effect of HPWS in order to enrich and broaden our understanding of this area of inquiry. Third, recent research has emphasized the

necessity to investigate the process through which HPWS foster employee voice (Badru *et al.*, 2022; Doshi and Nigam, 2023; Mowbray *et al.*, 2021). In other words, this research addresses one of the primary concerns of the HPWS literature, i.e. the need to better explain the psychological factors between HPWS and employee behavioral and attitudinal outcomes (Beltrán-Martín *et al.*, 2023; Karadas and Karatepe, 2019) by examining the underlying mechanisms through which HPWS influence employee voice behavior (Doshi and Nigam, 2023). To the best of our knowledge, this study is the first to explore how HPWS can promote employee voice through sequential mediation pathways of psychological meaningfulness and work engagement. Thus, it extends current knowledge of the predictors of voice behavior, especially in the Middle East, a region that has received less attention (Aboramadan, 2022).

2. Literature review and hypotheses

2.1 HPWS and voice behavior

HPWS are a bundle of HR practices that mobilize employees' ability, motivation, and opportunity to enhance corporate performance (Doshi and Nigam, 2023; Haar *et al.*, 2021; Karadas and Karatepe, 2019; Zhang *et al.*, 2014). Previous literature suggests that HPWS are a set of HRM practices that work together as a system (e.g. Conteh and Yuan, 2022; Kloutsiniotis and Mihail, 2020a; Wang *et al.*, 2019). In other words, focusing on certain practices such as opportunity-enhancing alone (Chamberlin *et al.*, 2017) is not sufficient to improve performance. Alternatively, other practices, including ability-enhancing and motivation-enhancing are instrumental to promote employees' motivation and commitment (Mowbray *et al.*, 2021). In their conceptual study, Mowbray *et al.* (2021) contend that little is known about the role of the AMO dimensions within the HPWS literature to promote voice behavior. Thus, grounded on AMO theory (Appelbaum, 2000), we propose that HPWS may positively influence employee voice behavior.

AMO framework suggests that employee performance depends on important factors including their "ability, motivation, and opportunity" (Appelbaum, 2000; Jiang *et al.*, 2012). That is, the ability-enhancing factor aims at improving employees' knowledge, skills, and abilities to perform better (Abualigah *et al.*, 2024). Practices such as appropriate recruitment and training are likely to enhance employees' capabilities and improve their knowledge of work tasks, enabling them to recognize problems and thus increasing their ability to express their opinions (Mowbray *et al.*, 2021). The motivation-enhancing factor focuses on increasing employee motivation and desire to do the job (Doshi and Nigam, 2023). This includes intrinsic and extrinsic motivation such as career advancement, promotion to positions with higher responsibility, incentives, and pay-for-performance (Ashiru *et al.*, 2022; Ehmrooth *et al.*, 2023). Such practices may improve pro-social motivation among employees and encourage them to engage in beneficial organizational activities such as communicating their thoughts (Harley, 2020; Mowbray *et al.*, 2021). The opportunity-enhancing factor emphasizes employee involvement and participation in decision-making, knowledge sharing, open-communication, and job design (Bos-Nehles *et al.*, 2023). Considering that voice behavior is a constructive, voluntary, and improvement-oriented communication aimed at improving the situation (Kundi *et al.*, 2023; LePine and Van Dyne, 2001), opportunity-enhancing practices are likely to increase employees' confidence to suggest ideas and voice concerns to further enhance their performance (Chamberlin *et al.*, 2017; Mowbray *et al.*, 2021). Empirically, recent studies have found a positive association between HPWS and voice behavior (Badru *et al.*, 2022; Doshi and Nigam, 2023). However, other research found an insignificant association between HPWS and employee voice (Ashiru *et al.*, 2022). In light of these inconsistent results, and due to the limited studies on the link between HPWS and employee voice behavior in the Middle East, we propose that:

H1. HPWS positively impact voice behavior.

2.2 Mediation of psychological meaningfulness

HPWS are characterized by various HR practices designed to create an environment that fosters employee commitment, motivation, and enhanced performance (Aboramadan *et al.*, 2022; Dorta-Afonso *et al.*, 2023; Doshi and Nigam, 2023; Karadas and Karatepe, 2019). More specifically, when employees perceive their workplace as having a high-performance culture, it can enhance their sense of psychological meaningfulness (Kubiak, 2022; Beltrán-Martín *et al.*, 2023). That is, HPWS provide employees with a clear understanding of their roles and expectations, allowing them to connect their efforts to the organization's overall objectives (Para-González *et al.*, 2019). This heightened sense of purpose and understanding translates into greater psychological meaningfulness (Barbar *et al.*, 2024). According to Kahn (1990), psychological meaningfulness refers to “a feeling that one is receiving a return on investments of one's self in currency of physical, cognitive, or emotional energy” (pp. 703–704). In other words, it is defined as feeling one's work is valuable, useful, and worthwhile (Byrne *et al.*, 2016). In light of this, when employees find their work to be meaningful, they are more likely to engage in voice behavior (Fürstenberg *et al.*, 2021). Studies suggest that psychological meaningfulness is important to enhance voice behavior (Duan *et al.*, 2020). This is because individuals who feel that their contributions matter and can make a difference are motivated to actively participate in discussions, share their ideas and suggest improvements. They are driven by a sense of ownership and responsibility towards their work and the organization as a whole.

The impact of psychological meaningfulness on the association between HPWS and voice behavior can be understood through social exchange theory (SET) (Blau, 1964). When employees feel that their efforts are recognized and appreciated, not only in terms of tangible benefits but also in terms of intrinsic factors like recognition, development opportunities, and supportive work culture (Zhang *et al.*, 2019), they are more inclined to reciprocate by actively engaging in voice behavior. This is because HPWS offer employees opportunities for skill development, autonomy and recognition, create a sense of commitment, obligation, and trust in the workplace, which subsequently provides them with meaningful and fulfilling work experiences (Abbasi *et al.*, 2021). Employees, feeling valued and supported, reciprocate by voicing their ideas and concerns constructively, thereby contributing to the positive and mutually beneficial exchange within the organization, as posited by the principles of social exchange (Cropanzano and Mitchell, 2005).

Accordingly, organizations with well-implemented HPWS tend to have employees who report higher levels of psychological meaningfulness. These employees are also more likely to engage in voice behavior, suggesting a mediating effect. In other words, HPWS create an environment that fosters psychological meaningfulness, motivating employees to express their opinions. In light of these arguments, we hypothesize that:

H2. Psychological meaningfulness mediates the relationship between HPWS and voice behavior.

2.3 Mediation of work engagement

Schaufeli *et al.* (2002, p. 74) define work engagement as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption”. It is a motivational construct whereby workers display enthusiasm and energy and immerse themselves in their work (Bakker and Demerouti, 2017). Bakker and Demerouti (2008, p. 215) argue that “engaged employees perform better because they experience positive emotions, enjoy better health, better utilize their resources, and convey their engagement to others”. Such a positive psychological state is likely to result in positive work outcomes (Mackay *et al.*, 2017).

Following the JD-R theorizing (Bakker and Demerouti, 2017), we argue that the HPWS-voice behavior nexus is mediated by work engagement. The theory suggests that job resources, i.e. facets of the job that support reaching objectives (Bakker and Demerouti, 2008), initiate a motivational pathway that results in work engagement and improved performance. That is,

HPWS, as a job resource, may activate a motivational process that results in improving employees' work engagement since they support learning and development and personal advancement (Bakker and Demerouti, 2017). Engaged employees, in turn, tend to invest more effort and exhibit extra-role behaviors (Abualigah and Badar, 2024; Karadas and Karatepe, 2019), such as voice behavior, because they are happily immersed in their work (Abualigah et al., 2023). In addition, HPWS can boost employees' motivation and readiness to be engaged at work by providing them with training opportunities to promote their knowledge and skills (Kloutsiniotis and Mihail, 2020a), and thus enhance their abilities to suggest ideas and express their opinions on work-related issues. In empirical terms, Kundi et al. (2023) suggested that the linkage between paradoxical leadership and voice behavior is mediated by work engagement. Furthermore, Badru et al. (2022) suggested that organizational engagement climate mediated the HPWS-voice behavior nexus. Considering the aforementioned arguments, we propose that:

H3. Work engagement mediates the relationship between HPWS and voice behavior.

2.4 Sequential mediation of psychological meaningfulness and work engagement

Based on the previous discussion, we argue that psychological meaningfulness and work engagement play crucial roles in determining whether employees actively engage in voice behavior, suggesting that these factors are not only intertwined but also operate sequentially. The core principles of SET and JD-R theory provide the theoretical foundations for the mediation roles of psychological meaningfulness and work engagement in the link HPWS-voice behavior link. According to SET, employees reciprocate favorable workplace conditions, such as those offered by HPWS, with increased commitment and positive behaviors (Zhang et al., 2019). When employees perceive that the organization provides them with opportunities for advancement and recognition as a result of HPWS, it triggers a feeling of obligation and trust, fostering psychological meaningfulness and work engagement. In addition, the JD-R framework underscores that job resources, namely HPWS, enhance employees' capabilities and skills, which promote employees' engagement at work (Bakker and Demerouti, 2017). Engaged employees, in turn, exhibit positive work behaviors (e.g. voice behavior) because they are energetic and enthusiasm about their work. These theories collectively explain how HPWS cultivate an environment that nurtures meaningfulness and engagement, ultimately encouraging employees to voice their ideas and concerns constructively.

These arguments underline the serial mediation of psychological meaningfulness and work engagement in the relationship between HPWS and voice behavior and offer a comprehensive framework for understanding how organizational practices influence employee behavior. HPWS set the stage by creating an environment where employees perceive their work as meaningful (Li et al., 2021), which in turn drives work engagement (Beltrán-Martín et al., 2023; Mostafa and Abed El-Motalib, 2020). Engaged employees are more likely to contribute to the organization by displaying extra-role behavior such as suggesting ideas that enhance organizational effectiveness (Kundi et al., 2023). This perspective underscores the significance of HPWS in nurturing a work environment that fosters meaningful work experiences and deep work engagement, which may increase voice behavior. In light of these arguments, we propose that:

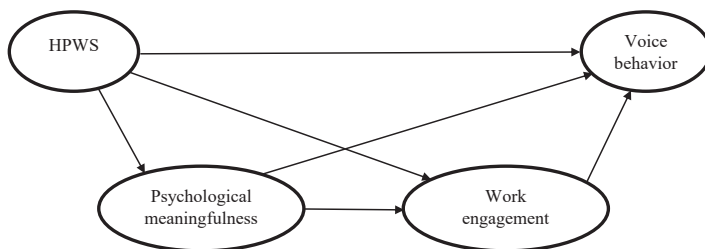
H4. Psychological meaningfulness and work engagement serially mediate the HPWS-voice behavior relationship.

Figure 1 shows the research model.

3. Methodology

3.1 Sample and procedure

Data was gathered from full-time nurses working in various hospitals located in Palestine. Cross-sectional data collection was chosen due to the difficulty of recontacting the nurses.



Source(s): Authors' own work

Figure 1. Research model

Access to the participants was granted after receiving permission from the hospital managers. A total of 900 surveys were distributed during break times and subsequently collected. Prior to participation, participants were briefed about the study, and the anonymity and confidentiality of their responses were assured. Of the 900 surveys distributed, 538 were completed and returned, resulting in a response rate of 59.77%.

Of the 538 participants, 52.97% were female, and 60.22% were married. Regarding age, 43.87% were under 30 years old, followed by 43.68% between 30–40 years old, and 12.45% over 40 years old. Regarding educational qualifications, 62.08% held bachelor's degrees, 14.68% had postgraduate degrees, and 23.23% held diplomas. Finally, when considering tenure, 46.47% had six years or less, 27.88% had between 6–12 years, and 25.65% had over 12 years of experience.

3.2 Measurements

All items were assessed using established scales. Items were rated on a “5-point Likert scale” ranging from “1 = strongly disagree to 5 = strongly agree”.

HPWS were measured using a 12-item scale developed by [Zhang et al. \(2014\)](#). Sample items were “Applicants undergo structured interviews before being hired” and “Employees are often asked by their supervisors to participate in decisions”. The reliability of the scale was 0.71.

Psychological meaningfulness was measured using a 6-item scale developed by [May et al. \(2004\)](#). A sample item was “I feel that the work I do on my job is valuable”. The reliability of the scale was 0.86.

Work engagement was assessed through a 9-item scale proposed by [Schaufeli et al. \(2006\)](#). An example item was “At my work, I feel bursting with energy”. The reliability of the scale was 0.78.

Voice behavior was measured using a 6-item scale proposed by [Van Dyne and LePine \(1998\)](#). A sample item was “I speak up in my group with ideas for new projects or changes in procedures”. The reliability of the scale was 0.82.

Covariates were included in the main analysis. In particular, respondents' age, gender, and tenure were considered, in accordance with prior research (e.g. [Abualigah et al., 2023](#); [Kundi et al., 2023](#)).

4. Results

[Table 1](#) presents the descriptive statistics and correlations among the study variables.

4.1 Measurement model

“Confirmatory factor analysis” (CFA) was performed to evaluate the fit of the measurement model and the distinctiveness of the study variables, which included HPWS, psychological

Table 1. Descriptive statistics and correlations

	Variables	Mean	SD	CR	AVE	1	2	3	4	5	6	7	8
1	Gender	–	–	–	–	–							
2	Marital	–	–	–	–	0.12**	–						
3	Age	–	–	–	–	–0.11**	–0.39**	–					
4	Tenure	–	–	–	–	–0.05	–0.34**	0.71**	–				
5	HPWS	2.92	0.66	0.91	0.51	–0.07	0.02	–0.16**	–0.16**	–			
6	Psychological meaningfulness	3.73	0.82	0.94	0.74	–0.08*	–0.11**	–0.14**	–0.17**	0.34**	–		
7	Work engagement	2.78	0.59	0.93	0.61	–0.07	–0.03	–0.08*	–0.09*	0.39**	0.60**	–	
8	Voice behavior	3.71	0.78	0.92	0.67	–0.13**	–0.07	–0.11**	–0.15**	0.56**	0.60**	0.69**	–

Note(s): *N* = 538. HPWS = High Performance Work Systems; CR = Composite Reliability; AVE = Average Variance Extracted. * $p < 0.05$, ** $p < 0.01$

Source(s): Authors' own work

meaningfulness, work engagement, and voice behavior. These constructs were modeled as latent variables with their respective items as indicators. The results demonstrated that the proposed four-factor model provided a good fit to the data ($\chi^2 = 1420.54$, $df = 442$, $CFI = 0.93$, $RMSEA = 0.06$, and $SRMR = 0.05$). Additionally, it outperformed alternative models, including a three-factor model where HPWS and psychological meaningfulness were combined ($\Delta\chi^2 = 60.69$, $\Delta df = 01$, $p < 0.001$), a two-factor model where HPWS, psychological meaningfulness, and voice behavior were combined ($\Delta\chi^2 = 282.44$, $\Delta df = 02$, $p < 0.001$), and a one-factor model where all items loaded onto a single factor ($\Delta\chi^2 = 30.35$, $\Delta df = 07$, $p < 0.001$), as indicated by the chi-square difference test.

Moreover, we ensured the convergent validity of the variables through several means. First, the composite reliability (CR) of each variable exceeded the recommended threshold of 0.70. Second, the average variance extracted (AVE) for each variable was above the suggested cut-off of 0.50 (refer to [Table 1](#)). Additionally, we established discriminant validity using the heterotrait–monotrait (HTMT) scores. Our findings (see [Table 2](#)) demonstrated that all constructs exhibited an HTMT value below the established threshold of 0.85 ([Henseler et al., 2015](#)).

4.2 Common method bias

To assess the possible influence of common method bias (CMB) in our model, we followed the recommended approach outlined by [Podsakoff et al. \(2003\)](#). We introduced a four-factor measurement model and included an unmeasured latent method construct (ULMC) in the analysis. All loadings on the ULMC were constrained to be equal, and we set the correlations between the ULMC and the other latent factors to zero, with the variance of the ULMC fixed at 1. When adding the CMV factor, the model fit of the four-factor baseline model did not improve significantly ($\Delta\chi^2 = 52.91$, $\Delta CFI = 0.003$, $\Delta RMSEA = 0.001$), indicating that our baseline model is at least not contaminated by a ULMC ([Williams et al., 1989](#)) and thus we excluded it in our main analyses.

4.3 Hypothesis testing

Hypotheses were tested using structural equation modeling (SEM) in AMOS. [Table 3](#) presents the results of SEM. As can be seen in [Table 3](#), HPWS had a positive effect on employee psychological meaningfulness ($\beta = 0.38$, $p < 0.01$), work engagement ($\beta = 0.19$, $p < 0.01$), and voice behavior ($\beta = 0.36$, $p < 0.01$; [H1](#) supported). Additionally, psychological meaningfulness was positively associated with work engagement ($\beta = 0.39$, $p < 0.01$) and voice behavior ($\beta = 0.22$, $p < 0.01$). The indirect effect of HPWS on voice behavior through psychological meaningfulness (indirect effect = 0.087, 95% CI = 0.038, 0.142) and work engagement (indirect effect = 0.106, 95% CI = 0.059, 0.170) was positive and significant, supporting [H2](#) and [H3](#), respectively. Furthermore, the serial indirect effect of HPWS on voice behavior through psychological meaningfulness and work engagement (indirect

Table 2. Heterotrait monotrait (HTMT) analysis

	HPWS	Psychological meaningfulness	Work engagement	Voice behavior
HPWS	–			
Psychological meaningfulness	0.36	–		
Work engagement	0.41	0.59	–	
Voice behavior	0.58	0.59	0.67	–

Note(s): HPWS = High Performance Work Systems
Source(s): Authors' own work

Table 3. Results of structural model

Path	Estimate	95% CI	
		LLCI	ULCI
HPWS → Voice behavior	0.366**	0.226	0.397
HPWS → Psychological meaningfulness	0.386**	0.226	0.400
Psychological meaningfulness → Work Engagement	0.391**	0.446	0.629
HPWS → Work Engagement	0.191**	0.132	0.297
Work Engagement → Voice behavior	0.557**	0.303	0.544
Psychological meaningfulness → Voice behavior	0.225**	0.114	0.345
HPWS → Psychological meaningfulness → Work Engagement	0.151**	0.099	0.210
HPWS → Psychological meaningfulness → Voice behavior	0.087**	0.038	0.142
HPWS → Work Engagement → Voice behavior	0.106**	0.059	0.170
HPWS → Psychological meaningfulness → Work Engagement → Voice behavior	0.084**	0.049	0.129

Note(s): *N* = 538. CI = confidence interval; HPWSs = high performance work systems. * *p* < 0.05, ** *p* < 0.01. Age, gender, and tenure are controlled

Source(s): Authors' own work

effect = 0.084, 95% CI = 0.049, 0.129) was also positive and significant, confirming [H4](#). Among covariates, only gender was significantly associated with voice behavior ($\beta = -0.11$, $p < 0.05$). Furthermore, we ran the SEM without including the covariates and found no changes in the main findings.

5. Discussion

This study aimed to examine the association between HPWS and voice behavior. It also sought to examine the underlying mechanism of the aforesaid variables. More specifically, we investigated psychological meaningfulness and work engagement as sequential mediators of the influence of HPWS on voice behavior. Our research found that HPWS positively impact employee voice behavior. This corroborates recent research which suggests that employees' perceptions of the investment in HPWS may foster extra-role behaviors such as voice behavior ([Doshi and Nigam, 2023](#)). This is also consistent with the AMO framework, indicating that ability, motivation, and opportunity practices offer a resourceful environment that influence positively employees' perceptions of HPWS and therefore tend to engage in voice behavior, as they feel motivated and personally invested in contributing to the organization's improvement ([Mowbray et al., 2021](#)).

In addition, our results showed that psychological meaningfulness mediated the association between HPWS and voice behavior. This is in line with prior studies ([Beltrán-Martín et al., 2023](#); [Hameli and Bela, 2023](#)) which suggest that psychological meaningfulness mediated the linkage between HRM practices and employee well-being. This result is consonant with SET ([Blau, 1964](#); [Cropanzano and Mitchell, 2005](#)), which demonstrates that when employees perceive an organization's commitment to offer them ample resources (i.e. HPWS) to develop their capabilities, they tend to trust their organization and experience meaningfulness in their work. In such a high-quality and trusting relationship, employees, in turn, feel obliged to reciprocate by suggesting ideas and expressing their opinions at work.

Our results further suggest that work engagement mediated the HPWS-employee voice behavior nexus. This is consistent with previous studies ([Karadas and Karatepe, 2019](#)) which reveal that work engagement mediated the connection between HPWS and work outcomes. In addition, this result is congruent with the motivational pathway of JD-R theory ([Bakker and Demerouti, 2017](#)), which suggests work engagement is the mechanism through which job resources influence job-related outcomes. Consequently, employees are inclined to display extra-role behaviors (e.g. voice behavior). In other words, employees who are working in a

resourceful workplace tend to be more work engaged. Such employees show dedication and enthusiasm in their work and display discretionary behaviors such as voice behavior.

Lastly, our results suggest a sequential mediation of meaningfulness and engagement in the HPWS-voice behavior nexus. That is, HPWS practices create a favorable work environment where employees find opportunities for personal development and growth. They tend to interpret the investment in HPWS as an indication of the firm's devotion to them, which is expected to foster psychological meaningfulness (Beltrán-Martín *et al.*, 2023). Those employees who recognize their work is meaningful will invest greater effort and energy in their job tasks, thus enhancing work engagement (Kahn, 1990). Engaged employees, in turn, are dedicated, energetic, and enthusiastic about their work, and therefore motivated to express their opinions.

5.1 Theoretical implications

The current study contributes to the literature as follows. First, our study investigated the association between HPWS and voice behavior, thus addressing recent calls to explore this relationship (Mowbray *et al.*, 2021), especially in the service sector (Dimple and Kuriakose, 2023). Second, limited attention has been given to examining the HPWS-voice behavior link in the context of the Middle East (Aboramadan, 2022; Melhem and Darwish, 2023). Our study, to our knowledge, is the first to examine the aforesaid linkage in this under-researched region. Along similar lines, by examining the association between HPWS and individual-level outcomes (i.e. voice behavior), this study enriches the current understanding of HRM research in the region which largely focuses on the HRM-organizational performance relationship (Aboramadan, 2022). Second, our study examined the mechanism by which HPWS influence voice behavior. Specifically, this research responds to recent calls (Badru *et al.*, 2022; Beltrán-Martín *et al.*, 2023; Doshi and Nigam, 2023; Mowbray *et al.*, 2021) to further explore the potential of psychological factors between HPWS and voice behavior. In other words, our study adds to current knowledge by providing a thorough understanding of how HPWS impact discretionary behaviors, such as voice behavior. In doing so, we contribute to the current knowledge by unlocking the “black box” of the HPWS-employee voice behavior nexus. To the best of our knowledge, the current research is the first to investigate psychological meaningfulness and work engagement as sequential mediators on the linkage between HPWS and voice behavior.

5.2 Practical implications

The research findings offer implications for HR practitioners and policymakers in healthcare organizations. The organization's commitment to effectively implementing a set of HR practices (i.e. HPWS) creates a resourceful workplace that enhances employee well-being and fosters voice behavior. For example, organizations should focus on selecting qualified employees who fit with the nature of the job and organizational culture. This is likely to maintain alignment between the newly hired employees and work requirements. Providing ongoing training programs to employees is important to enhance their knowledge and skills and build their motivation to be engaged in their work. Such programs are crucial in enhancing the mental and psychological readiness of employees and enabling them to express their opinions. To further support such developmental opportunities, organizations need to link constructive voice behaviors to rewards and compensation.

In addition, participation in decision-making, such as encouraging upward communication and providing feedback, is likely to contribute to problem solving and improve organizations' performance (Qamar *et al.*, 2023). Such practices also help staff members develop their capabilities and give them the chance to be promoted within their organizations. Overall, employees' perceptions of the investment of HPWS are instrumental in enhancing psychological meaningfulness and fostering their work engagement, thus encouraging them to voice their opinions and provide suggestions for improving the workplace.

5.3 Limitations and future research

This paper has some limitations which offer directions for future investigation. First, this research is based on self-report data which may raise concerns about potential CMB. Although our statistical techniques demonstrate that CMB is not problematic, we encourage upcoming research to collect multi-source data to minimize CMB. Second, this study is cross-sectional in nature, which limits the possibility of identifying causal effects. Thus, future studies should adopt a longitudinal design to address causality issues. Third, we examined meaningfulness and engagement as mediators between HPWS and voice behavior. Future studies may delve deeper by investigating other underlying mechanisms such as knowledge-sharing, organizational identification, and job embeddedness. Fourth, our study focuses on only one outcome (i.e. voice behavior). Scholars may explore the association between HPWS and other consequences (e.g. thriving, organizational attractiveness, organizational citizenship behavior, creativity, and quiet quitting). Lastly, this study is limited to the healthcare sector in Palestine. Upcoming research may investigate the research model in other service sectors in the Middle East to increase generalizability and provide enhanced theoretical accuracy.

References

- Abbasi, S.G., Shabbir, M.S., Abbas, M. and Tahir, M.S. (2021), "HPWS and knowledge sharing behavior: the role of psychological empowerment and organizational identification in public sector banks", *Journal of Public Affairs*, Vol. 21 No. 3, e2512, doi: [10.1002/pa.2512](https://doi.org/10.1002/pa.2512).
- Aboramadan, M. (2022), "High-performance work systems in an Arab Middle Eastern context: analysis from multisource data", *Evidence-based HRM: A Global Forum for Empirical Scholarship*, Vol. 10 No. 4, pp. 403-422, doi: [10.1108/ebhrm-04-2021-0070](https://doi.org/10.1108/ebhrm-04-2021-0070).
- Aboramadan, M., Kundi, Y.M., Elhamalawy, E. and Albashiti, B. (2022), "The effect of high-performance work systems on risk-taking and organizational citizenship behaviors: the mediating role of perceived safety climate", *Employee Relations: The International Journal*, Vol. 44 No. 6, pp. 1428-1447, doi: [10.1108/er-05-2021-0211](https://doi.org/10.1108/er-05-2021-0211).
- Abualigah, A., Darwish, T.K., Davies, J., Haq, M. and Ahmad, S.Z. (2023), "Supervisor support, religiosity, work engagement, and affective commitment: evidence from a Middle Eastern emerging market", *Journal of Asia Business Studies*, Vol. 18 No. 1, pp. 1-20, doi: [10.1108/jabs-11-2022-0394](https://doi.org/10.1108/jabs-11-2022-0394).
- Abualigah, A. and Badar, K. (2024), "Does spiritual leadership promote employees' green creativity? The mediating effect of green work engagement", *Journal of Organizational Effectiveness: People and Performance*, Vol. ahead-of-print.
- Abualigah, A., Badar, K., Nisar, Q.A. and Karatepe, O.M. (2024), "A moderated mediation model of green human resource management", *The Service Industries Journal*, Vol. 44 Nos 7-8, pp. 457-479, doi: [10.1080/02642069.2024.2332995](https://doi.org/10.1080/02642069.2024.2332995).
- Appelbaum, E. (2000), *Manufacturing Advantage: Why High-Performance Work Systems Pay off*, Cornell University Press.
- Ashiru, J.A., Erdil, G.E. and Oluwajana, D. (2022), "The linkage between high performance work systems on organizational performance, employee voice and employee innovation", *Journal of Organizational Change Management*, Vol. 35 No. 1, pp. 1-17, doi: [10.1108/jocm-02-2021-0039](https://doi.org/10.1108/jocm-02-2021-0039).
- Badru, A.F., Karadas, G. and Olugbade, O.A. (2022), "Employee voice: the impact of high-performance work systems and organisational engagement climate", *The Service Industries Journal*, Vol. 44 Nos 7-8, pp. 1-29, doi: [10.1080/02642069.2022.2056163](https://doi.org/10.1080/02642069.2022.2056163).
- Bai, Y., Lin, L. and Liu, J.T. (2019), "Leveraging the employee voice: a multi-level social learning perspective of ethical leadership", *The International Journal of Human Resource Management*, Vol. 30 No. 12, pp. 1869-1901, doi: [10.1080/09585192.2017.1308414](https://doi.org/10.1080/09585192.2017.1308414).
- Bakker, A.B. and Demerouti, E. (2008), "Towards a model of work engagement", *Career Development International*, Vol. 13 No. 3, pp. 209-223, doi: [10.1108/13620430810870476](https://doi.org/10.1108/13620430810870476).

- Bakker, A.B. and Demerouti, E. (2017), "Job demands–resources theory: taking stock and looking forward", *Journal of Occupational Health Psychology*, Vol. 22 No. 3, pp. 273-285, doi: [10.1037/ocp0000056](https://doi.org/10.1037/ocp0000056).
- Barbar, J., Abualigah, A., Dahleez, K., Abou-Al-Ross, S. and Aboramadan, M. (2024), "Ethical leadership and public healthcare organizational and employee outcomes: the role of psychological meaningfulness", *Leadership in Health Services*, doi: [10.1108/lhs-04-2024-0039](https://doi.org/10.1108/lhs-04-2024-0039).
- Beltrán-Martín, I., Guinot-Reinders, J. and Rodríguez-Sánchez, A.M. (2023), "Employee psychological conditions as mediators of the relationship between human resource management and employee work engagement", *The International Journal of Human Resource Management*, Vol. 34 No. 11, pp. 2331-2365, doi: [10.1080/09585192.2022.2078990](https://doi.org/10.1080/09585192.2022.2078990).
- Blau, P.M. (1964), *Exchange and Power in Social Life*, Wiley.
- Bos-Nehles, A., Townsend, K., Cafferkey, K. and Trullen, J. (2023), "Examining the ability, motivation and opportunity (AMO) framework in HRM research: conceptualization, measurement and interactions", *International Journal of Management Reviews*, Vol. 25 No. 4, pp. 725-739, doi: [10.1111/ijmr.12332](https://doi.org/10.1111/ijmr.12332).
- Boxall, P. and Macky, K. (2009), "Research and theory on high-performance work systems: progressing the high-involvement stream", *Human Resource Management Journal*, Vol. 19 No. 1, pp. 3-23, doi: [10.1111/j.1748-8583.2008.00082.x](https://doi.org/10.1111/j.1748-8583.2008.00082.x).
- Byrne, Z.S., Peters, J.M. and Weston, J.W. (2016), "The struggle with employee engagement: measures and construct clarification using five samples", *Journal of Applied Psychology*, Vol. 101 No. 9, pp. 1201-1227, doi: [10.1037/apl0000124](https://doi.org/10.1037/apl0000124).
- Chamberlin, M., Newton, D.W. and Lepine, J.A. (2017), "A meta-analysis of voice and its promotive and prohibitive forms: identification of key associations, distinctions, and future research directions", *Personnel Psychology*, Vol. 70 No. 1, pp. 11-71, doi: [10.1111/peps.12185](https://doi.org/10.1111/peps.12185).
- Conteh, S.B. and Yuan, Y. (2022), "The impact of high performance work system on employee service performance: the role of organizational support and organizational identification", *International Journal of Productivity and Performance Management*, Vol. 71 No. 7, pp. 2841-2864, doi: [10.1108/ijppm-08-2020-0439](https://doi.org/10.1108/ijppm-08-2020-0439).
- Cooke, F.L., Schuler, R. and Varma, A. (2020), "Human resource management research and practice in Asia: past, present and future", *Human Resource Management Review*, Vol. 30 No. 4, 100778, doi: [10.1016/j.hrmr.2020.100778](https://doi.org/10.1016/j.hrmr.2020.100778).
- Cropanzano, R. and Mitchell, M.S. (2005), "Social exchange theory: an interdisciplinary review", *Journal of Management*, Vol. 31 No. 6, pp. 874-900, doi: [10.1177/0149206305279602](https://doi.org/10.1177/0149206305279602).
- Datta, D.K., Guthrie, J.P. and Wright, P.M. (2005), "Human resource management and labor productivity: does industry matter?", *Academy of Management Journal*, Vol. 48 No. 1, pp. 135-145, doi: [10.5465/amj.2005.15993158](https://doi.org/10.5465/amj.2005.15993158).
- Dimple and Kuriakose, V. (2023), "High-performance work system in service sector: review and framework development", *The Service Industries Journal*, pp. 1-33, doi: [10.1080/02642069.2023.2240721](https://doi.org/10.1080/02642069.2023.2240721).
- Dorta-Afonso, D., Romero-Domínguez, L. and Benítez-Núñez, C. (2023), "It's worth it! High performance work systems for employee job satisfaction: the mediational role of burnout", *International Journal of Hospitality Management*, Vol. 108, 103364, doi: [10.1016/j.ijhm.2022.103364](https://doi.org/10.1016/j.ijhm.2022.103364).
- Doshi, P. and Nigam, P. (2023), "Analysing the effect of AMO framework on the employee's voice behaviour", *Journal of Organizational Effectiveness: People and Performance*, Vol. 10 No. 2, pp. 218-232, doi: [10.1108/joepp-05-2022-0117](https://doi.org/10.1108/joepp-05-2022-0117).
- Duan, J., Wang, X., Brinsfield, C.T. and Liu, S. (2020), "How enhancing employee well-being can encourage voice behavior: a desire fulfillment perspective", *Human Performance*, Vol. 33 No. 5, pp. 425-446, doi: [10.1080/08959285.2020.1811708](https://doi.org/10.1080/08959285.2020.1811708).
- Ehrnrooth, M., Kovesnikov, A., Balabanova, E. and Wechtler, H. (2023), "High-performance work system and transformational leadership for employee constructive voice: unique and relative

- importance in a high-power distance context", *The International Journal of Human Resource Management*, Vol. 34 No. 20, pp. 1-40, doi: [10.1080/09585192.2022.2163418](https://doi.org/10.1080/09585192.2022.2163418).
- Fürstenberg, N., Alfes, K. and Shantz, A. (2021), "Meaningfulness of work and supervisory-rated job performance: a moderated-mediation model", *Human Resource Management*, Vol. 60 No. 6, pp. 903-919, doi: [10.1002/hrm.22041](https://doi.org/10.1002/hrm.22041).
- Haar, J., Ghafoor, A., O'Kane, C., Daellenbach, U., Ruckstuhl, K. and Davenport, S. (2021), "High-performance work systems and manager creativity behaviours: what role do contextual factors play?", *Evidence-Based HRM: A Global Forum for Empirical Scholarship*, Vol. 9 No. 4, pp. 391-409.
- Hameli, K. and Bela, B. (2023), "High commitment HRM and well-being of frontline food service employees: the mediating roles of job demands and psychological conditions", *EuroMed Journal of Business*, doi: [10.1108/emjb-01-2023-0019](https://doi.org/10.1108/emjb-01-2023-0019).
- Harley, B. (2020), "High performance work systems and employee voice", in Wilkinson, A.J.D., Dundon, T. and Freeman, R. (Eds), *The Handbook of Research on Employee Voice*, 2nd ed., Edward Elgar Press, London, pp. 313-327.
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135, doi: [10.1007/s11747-014-0403-8](https://doi.org/10.1007/s11747-014-0403-8).
- Huselid, M.A. (1995), "The impact of human resource management practices on turnover, productivity, and corporate financial performance", *Academy of Management Journal*, Vol. 38 No. 3, pp. 635-672, doi: [10.5465/256741](https://doi.org/10.5465/256741).
- Jewell, D.O., Jewell, S.F. and Kaufman, B.E. (2022), "Designing and implementing high-performance work systems: insights from consulting practice for academic researchers", *Human Resource Management Review*, Vol. 32 No. 1, 100749, doi: [10.1016/j.hrmr.2020.100749](https://doi.org/10.1016/j.hrmr.2020.100749).
- Jiang, K., Lepak, D.P., Hu, J. and Baer, J.C. (2012), "How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms", *Academy of Management Journal*, Vol. 55 No. 6, pp. 1264-1294, doi: [10.5465/amj.2011.0088](https://doi.org/10.5465/amj.2011.0088).
- Kahn, W.A. (1990), "Psychological conditions of personal engagement and disengagement at work", *Academy of Management Journal*, Vol. 33 No. 4, pp. 692-724, doi: [10.5465/256287](https://doi.org/10.5465/256287).
- Karadas, G. and Karatepe, O.M. (2019), "Unraveling the black box: the linkage between high-performance work systems and employee outcomes", *Employee Relations*, Vol. 41 No. 1, pp. 67-83, doi: [10.1108/er-04-2017-0084](https://doi.org/10.1108/er-04-2017-0084).
- Kaushik, D. and Mukherjee, U. (2022), "High-performance work system: a systematic review of literature", *International Journal of Organizational Analysis*, Vol. 30 No. 6, pp. 1624-1643, doi: [10.1108/ijoa-07-2020-2282](https://doi.org/10.1108/ijoa-07-2020-2282).
- Kloutsiniotis, P.V. and Mihail, D.M. (2020a), "The effects of high performance work systems in employees' service-oriented OCB", *International Journal of Hospitality Management*, Vol. 90, 102610, doi: [10.1016/j.ijhm.2020.102610](https://doi.org/10.1016/j.ijhm.2020.102610).
- Kloutsiniotis, P.V. and Mihail, D.M. (2020b), "High performance work systems in the tourism and hospitality industry: a critical review", *International Journal of Contemporary Hospitality Management*, Vol. 32 No. 7, pp. 2365-2395, doi: [10.1108/ijchm-10-2019-0864](https://doi.org/10.1108/ijchm-10-2019-0864).
- Kubiak, E. (2022), "Increasing perceived work meaningfulness by implementing psychological need-satisfying performance management practices", *Human Resource Management Review*, Vol. 32 No. 3, 100792, doi: [10.1016/j.hrmr.2020.100792](https://doi.org/10.1016/j.hrmr.2020.100792).
- Kundi, Y.M., Aboramadan, M. and Abualigah, A. (2023), "Linking paradoxical leadership and individual in-role and extra-role performance: a multilevel examination", *Management Decision*, Vol. 61 No. 10, pp. 2851-2871, doi: [10.1108/md-10-2022-1353](https://doi.org/10.1108/md-10-2022-1353).
- LePine, J.A. and Van Dyne, L. (2001), "Voice and cooperative behavior as contrasting forms of contextual performance: evidence of differential relationships with big five personality characteristics and cognitive ability", *Journal of Applied Psychology*, Vol. 86 No. 2, pp. 326-336, doi: [10.1037/0021-9010.86.2.326](https://doi.org/10.1037/0021-9010.86.2.326).
- Li, Y., Li, X. and Liu, Y. (2021), "How Does high-performance work system prompt job crafting through autonomous motivation: the moderating role of initiative climate", *International Journal*

- of *Environmental Research and Public Health*, Vol. 18 No. 2, p. 384, doi: [10.3390/ijerph18020384](https://doi.org/10.3390/ijerph18020384).
- Mackay, M.M., Allen, J.A. and Landis, R.S. (2017), "Investigating the incremental validity of employee engagement in the prediction of employee effectiveness: a meta-analytic path analysis", *Human Resource Management Review*, Vol. 27 No. 1, pp.108-120, [10.1016/j.hrmr.2016.03.002](https://doi.org/10.1016/j.hrmr.2016.03.002).
- May, D.R., Gilson, R.L. and Harter, L.M. (2004), "The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work", *Journal of Occupational and Organizational Psychology*, Vol. 77 No. 1, pp. 11-37, doi: [10.1348/096317904322915892](https://doi.org/10.1348/096317904322915892).
- Melhem, M.J. and Darwish, T.K. (2023), "Employee voice in Jordan: challenges and opportunities", in *Employee Voice in the Global South: Insights from Asia*, pp. 127-158.
- Miao, R., Bozionelos, N., Zhou, W. and Newman, A. (2021), "High-performance work systems and key employee attitudes: the roles of psychological capital and an interactional justice climate", *The International Journal of Human Resource Management*, Vol. 32 No. 2, pp. 443-477, doi: [10.1080/09585192.2019.1710722](https://doi.org/10.1080/09585192.2019.1710722).
- Morrison, E.W. (2023), "Employee voice and silence: taking stock a decade later", *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 10 No. 1, pp. 79-107, doi: [10.1146/annurev-orgpsych-120920-054654](https://doi.org/10.1146/annurev-orgpsych-120920-054654).
- Mostafa, A.M.S. and Abed El-Motalib, E.A. (2020), "Ethical leadership, work meaningfulness, and work engagement in the public sector", *Review of Public Personnel Administration*, Vol. 40 No. 1, pp.112-131, [10.1177/0734371x18790628](https://doi.org/10.1177/0734371x18790628).
- Mowbray, P.K., Wilkinson, A. and Tse, H.H. (2021), "High-performance work systems and employee voice behaviour: an integrated model and research agenda", *Personnel Review*, Vol. 50 No. 6, pp. 1530-1543, doi: [10.1108/pr-12-2019-0692](https://doi.org/10.1108/pr-12-2019-0692).
- Ng, T.W. and Feldman, D.C. (2012), "Employee voice behavior: a meta-analytic test of the conservation of resources framework", *Journal of Organizational Behavior*, Vol. 33 No. 2, pp. 216-234, doi: [10.1002/job.754](https://doi.org/10.1002/job.754).
- Obeidat, S.M., Mitchell, R. and Bray, M. (2016), "The link between high performance work practices and organizational performance: empirically validating the conceptualization of HPWP according to the AMO model", *Employee Relations*, Vol. 38 No. 4, pp. 578-595, doi: [10.1108/er-08-2015-0163](https://doi.org/10.1108/er-08-2015-0163).
- Para-González, L., Jiménez-Jiménez, D. and Martínez-Lorente, Á.R. (2019), "Do SHRM and HPWS shape employees' affective commitment and empowerment?", *Evidence-based HRM: A Global Forum for Empirical Scholarship*, Vol. 7 No. 3, pp. 300-324, doi: [10.1108/ebhrm-01-2019-0004](https://doi.org/10.1108/ebhrm-01-2019-0004).
- 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, pp. 879-903, doi: [10.1037/0021-9010.88.5.879](https://doi.org/10.1037/0021-9010.88.5.879).
- Qamar, F., Soomro, S.A. and Kundi, Y.M. (2023), "Linking high-performance work systems and happiness at work: role of career aspiration and thriving", *Career Development International*, Vol. 28 No. 5, pp. 536-553, doi: [10.1108/cdi-02-2023-0047](https://doi.org/10.1108/cdi-02-2023-0047).
- Schaufeli, W.B., Salanova, M., González-Romá, 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, doi: [10.1023/a:1015630930326](https://doi.org/10.1023/a:1015630930326).
- 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, doi: [10.1177/0013164405282471](https://doi.org/10.1177/0013164405282471).
- Shin, D. and Konrad, A.M. (2017), "Causality between high-performance work systems and organizational performance", *Journal of Management*, Vol. 43 No. 4, pp. 973-997, doi: [10.1177/0149206314544746](https://doi.org/10.1177/0149206314544746).

- Tedone, A.M. and Bruk-Lee, V. (2022), "Speaking up at work: personality's influence on employee voice behavior", *International Journal of Organizational Analysis*, Vol. 30 No. 2, pp. 289-304, doi: [10.1108/ijoa-09-2020-2417](https://doi.org/10.1108/ijoa-09-2020-2417).
- Van Dyne, L. and LePine, J.A. (1998), "Helping and voice extra-role behaviors: evidence of construct and predictive validity", *Academy of Management Journal*, Vol. 41 No. 1, pp. 108-119, doi: [10.5465/256902](https://doi.org/10.5465/256902).
- Wang, C.H., Baba, V.V., Hackett, R.D. and Hong, Y. (2019), "Employee-experienced high-performance work systems in facilitating employee helping and voice: the role of employees' proximal perceptions and trust in the supervisor", *Human Performance*, Vol. 32 No. 2, pp. 69-91, doi: [10.1080/08959285.2019.1587765](https://doi.org/10.1080/08959285.2019.1587765).
- Wang, Z., Ren, S. and Meng, L. (2022), "High-performance work systems and thriving at work: the role of cognitive appraisal and servant leadership", *Personnel Review*, Vol. 51 No. 7, pp. 1749-1771, doi: [10.1108/pr-10-2019-0561](https://doi.org/10.1108/pr-10-2019-0561).
- Williams, L.J., Cote, J.A. and Buckley, M.R. (1989), "Lack of method variance in self-reported affect and perceptions at work: reality or artifact?", *Journal of Applied Psychology*, Vol. 74 No. 3, pp. 462-468, doi: [10.1037//0021-9010.74.3.462](https://doi.org/10.1037//0021-9010.74.3.462).
- Wright, P.M. and Boswell, W.R. (2002), "Desegregating HRM: a review and synthesis of micro and macro human resource management research", *Journal of Management*, Vol. 28 No. 3, pp. 247-276, doi: [10.1016/s0149-2063\(02\)00128-9](https://doi.org/10.1016/s0149-2063(02)00128-9).
- Wright, P.M., Gardner, T.M. and Moynihan, L.M. (2003), "The impact of HR practices on the performance of business units", *Human Resource Management Journal*, Vol. 13 No. 3, pp. 21-36, doi: [10.1111/j.1748-8583.2003.tb00096.x](https://doi.org/10.1111/j.1748-8583.2003.tb00096.x).
- Xiong, X.Y. (2023), "Linking high-performance work systems to work engagement: exploring the mediating role of perceived internal marketability", *Journal of Management and Organization*, pp. 1-13, doi: [10.1017/jmo.2023.30](https://doi.org/10.1017/jmo.2023.30).
- Zhang, B. and Morris, J.L. (2014), "High-performance work systems and organizational performance: testing the mediation role of employee outcomes using evidence from PR China", *The International Journal of Human Resource Management*, Vol. 25 No. 1, pp. 68-90, doi: [10.1080/09585192.2013.781524](https://doi.org/10.1080/09585192.2013.781524).
- Zhang, M., Di Fan, D. and Zhu, C.J. (2014), "High-performance work systems, corporate social performance and employee outcomes: exploring the missing links", *Journal of Business Ethics*, Vol. 120 No. 3, pp. 423-435, doi: [10.1007/s10551-013-1672-8](https://doi.org/10.1007/s10551-013-1672-8).
- Zhang, J., Bal, P.M., Akhtar, M.N., Long, L., Zhang, Y. and Ma, Z. (2019), "High-performance work system and employee performance: the mediating roles of social exchange and thriving and the moderating effect of employee proactive personality", *Asia Pacific Journal of Human Resources*, Vol. 57 No. 3, pp. 369-395, doi: [10.1111/1744-7941.12199](https://doi.org/10.1111/1744-7941.12199).

Corresponding author

Ahmad Abualigah can be contacted at: ahmad.abualigah@adu.ac.ae