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Exploring the nexus of high-performance work systems and ethical leadership on employee attitudes and behaviours: case study evidence from healthcare

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Abstract

Purpose – This study explores the role of high-performance work systems (HPWS) and ethical leadership in influencing employee affective commitment (AC) and organisational citizenship behaviours (OCB) in two large tertiary public hospitals in Pakistan.

Design/methodology/approach – Employing a case study approach, survey data were gathered from 814 front-line doctors and nurses. SPSS and AMOS were used for data cleaning and analysis, and structural equation modelling was deployed for hypothesis testing.

Findings – Our findings suggest that in both hospitals, affective commitment significantly and positively mediated the relationship between (1) HPWS and OCB and (2) ethical leadership and OCB. However, the role of ethical leadership as a boundary variable was significant in one hospital but insignificant in the other hospital.

Research limitations/implications – The research was cross-sectional, and data were collected from a convenient sample from two public hospitals in Pakistan, which affects our ability to generalise the findings to different contexts too broadly.

Originality/value – This study presents a unique and important contribution by highlighting a probable psychological mechanism through which ethical leaders implementing HPWS influence employee attitudes and behaviours (AC and OCB) within the Pakistani public health sector. By examining the leadership-HPWS relationship in this sector, our study tests the applicability of Western concepts (HPWS) in a developing country and the public health sector context, with some of the findings being inconsistent with extant evidence as it pertains to the outcomes of the leadership-HPWS relationship. Further, our study demonstrates the value of case study research in examining complex phenomena.

Keywords High-performance work systems, Ethical leadership, Affective commitment, Organisational citizenship behaviours, Public healthcare sector, And Pakistan

Paper type Research paper

Introduction

Public hospitals play a key role in providing healthcare in Pakistan, accounting for more than 70% of the healthcare budget (Malik and Ashraf, 2016). Since 2018, there has been a greater focus on public hospitals as the Pakistani government has prioritised increasing the healthcare budget and recruiting more doctors and nurses to overcome workforce shortages (Government of Pakistan, 2023). There is also pressure on public hospitals to deliver high-quality services to an increasing number of patients. Moreover, there is evidence of a public health system under

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stress due to the impact of natural disasters, limited government budget allocation leading to scarce financial and human resources, ineffective management practices, and poor accountability (Callen *et al*., 2013; Government of Pakistan, 2023; Khurshid, 2010; Kurji *et al*., 2016).

Empirical evidence from Pakistan suggests that there is potential to improve organisational effectiveness by adopting effective human resource management (HRM) practices, including high-performance work systems (Callen *et al*., 2013; Fareed *et al*., 2017; Khurshid, 2010; Koser *et al*., 2018; Nadeem *et al*., 2019). However, in the public sector of a developing country such as Pakistan, there are questions about the existence of sophisticated HRM practices such as HPWS. For example, Faisal *et al*. (2023) found that Pakistani public hospitals lacked HRM departments and specialist HRM professionals, had limited autonomy over decision-making on people-related matters at the organisational level, and both leaders and clinicians displayed unethical behaviours. Despite these findings, Faisal *et al*. (2023) argued that hospital leaders were optimistic that establishing a professionalised, decentralised HRM function could address poor attitudes and behaviours and consequently improve organisational performance. Moreover, Suhail and Steen (2021) advocated a bottom-up approach to implementing HRM practices in Pakistani public hospitals. Thus, in the context of scarce resources, the existence of ethical leaders at the supervisory level may be ideally placed to contribute to the implementation of HRM practices.

The extant literature suggests that Pakistani public sector organisations are prone to widespread unethical practices, including corruption (Ahmad and Umrani, 2019; Shaheen *et al*., 2017), which could undermine significant reforms. In this context, focusing only on HRM practices may not have the desired effects in the healthcare sector of a country with poor accountability and supervisory structures, weak implementation systems, and a culture of unethical practices (Callen *et al*., 2013; Kurji *et al*., 2016; Shaheen *et al*., 2017). Instead, there are potential benefits in examining how ethical leadership (EL) at the supervisory level could influence employees' desired attitudes and behaviours through modelling ethical decision-making and appropriate behaviours.

To understand how HPWS and ethical leadership manifest in the Pakistani public health sector, we explore employee perspectives in two large tertiary hospitals. Despite resource constraints and HRM challenges, employee experience of key elements of HPWS coupled with ethical leadership at the supervisory level has the potential to influence their attitudes (such as affective commitment) and behaviours (such as OCB). Therefore, the purpose of this study is fourfold. First, the existing research consistently advocates for the need to unpack the black box mechanism that translates HPWS into positive organisational outcomes (Jiang and Messersmith, 2018; Lin *et al*., 2022; Messersmith *et al*., 2011; Miao *et al*., 2022). Thus, this study has the potential to shed light on how HPWS manifests within two large tertiary hospitals and extend the literature on HPWS within the healthcare sector. Moreover, we answer recent calls to identify the boundary conditions between HR practices and performance, thereby clarifying the processes through which HR practices influence employee attitudes, in under-explored country contexts, in particular on the effects of HR practices on performance in the public sector (Blom *et al*., 2020; Boselie *et al*., 2021; Faisal *et al*., 2023; Kim *et al*., 2024; Suhail and Steen, 2021). Second, it is vital to examine potential pathways through which HR could improve the quality of healthcare services, for example, how leader behaviour impacts HR practices, job attitudes, and behaviours. While research indicates that leader behaviour enhances job attitudes (AC) and behaviours (OCB) in the workplace (Abuzaid, 2018; Bedi *et al*., 2016), there is little evidence on the extent to which and how consistently ethical leaders are helpful in implementing HPWS and thus influencing employee affective commitment and encouraging OCB. Therefore, there is a need for further research on the collective impact of HPWS and ethical leadership on affective commitment and OCB.

Third, the study has the potential to examine the psychological processes through which leadership, represented by ethical leader behaviours, relate to HPWS in the public sector of a developing country and add to findings on EL-HPWS research, mainly emanating from the

private sector (Bartram *et al*., 2014; Chen *et al*., 2021; Mihail and Kloutsiniotis, 2016). Recognising the novel research context, we believe our findings will significantly contribute to the body of literature on HPWS and ethical leadership. Moreover, the role of ethical leadership as a boundary condition in HPWS studies is also novel. We add to the growing but limited number of studies examining the role of HPWS and ethical leadership (Lin *et al*., 2023; Neves *et al*., 2018), by specifically hypothesising ethical leadership as a moderated mediator in the relationship between HPWS and work attitudes and behaviours within a public sector of a developing country. This can extend our understanding of the moderated mediation mechanism that extends beyond the previously investigated national and private sector contexts. Finally, we aim to uncover whether affective commitment acts as a mediator between HPWS and OCB within the Pakistani healthcare sector. This would help generalise past findings on the HPWS and OCB (Boselie, 2010; Kehoe and Wright, 2013) using data from the context of a developing country. Therefore, our study would add to the growing literature relating to the antecedents of affective commitment and OCB in the less explored but unique context of the public sector of Pakistan.

Recognising the complexity of studying effective healthcare provision, we adopted a case study design. This would enable us to better understand how the EL-HPWS relationship manifested in a developing country with a vast population reliant on public healthcare and inadequate financial and human resources. Furthermore, poor geographical distribution of health facilities forces patients to visit tertiary hospitals even for basic health needs. To truly understand the issues relating to the effectiveness of HPWS, the case study design allows us to understand the role of HPWS and ethical leaders at the supervisory level in influencing employee attitudes and behaviours. Therefore, by studying the complementary nature of ethical leadership and HPWS, we aim to discern how ethical leadership and HPWS predict employee attitudes (e.g. affective commitment) and behaviours (e.g. OCB) within public hospitals.

Consistent with social exchange theory (SET) (Blau, 1964; Cropanzano and Mitchell, 2005), we examine whether HPWS and ethical leaders can shape social exchange through role modelling and follower inspiration. Based on SET, it is highly likely that employees who experience HPWS and perceive their leaders to be more ethical will likely invest more energy and commitment at the workplace, consequently exhibiting positive citizenship behaviours that subsequently lead to improved organisational performance. Finally, contextual factors can vary from one organisation to another, hence, unlike the majority of studies, this study is one of the first few studies that have adopted a case study design to conduct an in-depth analysis of the HR and leadership perceptions of employees at the micro level while acknowledging the role of contextual factors, such as ethical leadership at the supervisory level, in influencing employee attitudes and behaviours in the public healthcare of Pakistan.

In this paper, we first review the literature on HPWS, ethical leadership, affective commitment, and OCB and how they relate to improving health outcomes within Pakistan's public healthcare sector. Second, we outline our hypotheses and describe our research methodology. Third, we present and discuss our findings, and finally, we conclude by outlining theoretical and practical implications and future research directions.

Theoretical background

High-performance work systems, ethical leadership, Employee Attitudes and behaviours

There is growing evidence indicating that HRM plays a crucial role in labour-intensive sectors such as healthcare (Bartram *et al*., 2014; Etchegaray *et al*., 2011). Research has highlighted how organisations that employ a combination of HRM practices working in tandem attain improved organisational effectiveness (Alothmany *et al*., 2023; Jiang and Messersmith, 2018). This combination of HRM practices, often referred to as HPWS, is an interrelated "set of" or "bundles of" HRM practices that work together to create a synergistic impact on employee and organisational performance by influencing employee attitudes and behaviours (Combs *et al*.,

2006; Huselid, 1995). The HPWS studies in healthcare settings combine HRM practices such as selective hiring, extensive training, teamwork, decentralised decision-making, reduced status distinctions, information sharing, contingent compensation, employment security, and high-quality work (Bartram *et al*., 2014; Zacharatos *et al*., 2005). These studies have found that engaging health professionals through HPWS can improve organisational outcomes (Ang *et al*., 2013; Bartram *et al*., 2014; Etchegaray *et al*., 2011). Studies from non-Western countries also suggest that effective HRM practices can improve hospital performance in terms of efficiency and effectiveness and consequently lead to a better quality of care for more people (Alothmany *et al*., 2023; Callen *et al*., 2013; Khurshid, 2010; Min *et al*., 2019). Therefore, in contexts such as Pakistani healthcare, where resources are limited, investing in HRM practices could positively influence the delivery of healthcare services (Fareed *et al*., 2017).

In Pakistan, studies have explored HPWS and organisational performance in the telecommunications and textile sectors (Koser *et al*., 2018; Nadeem *et al*., 2019). In telecommunications, Nadeem *et al*. (2019) identified a relationship between HPWS and service performance and found that OCB was positively linked through the mediating role of employee resilience. Koser *et al*. (2018), in textiles, found that HPWS can be beneficial by unlocking emerging opportunities through implementing international best practices. Based on this evidence, we argue that HPWS has the potential to positively impact organisational outcomes in other sectors in Pakistan, including the health sector.

Related to the growing studies on HPWS, researchers have also explored the role of leadership, particularly supervisors, in implementing HRM practices (Lin *et al*., 2022; Pak and Kim, 2018) for two main reasons. First, supervisors are members of the management hierarchy and have the potential to influence employee perspectives regarding HRM practices (Bos-Nehles and Meijerink, 2018; Bos-Nehles *et al*., 2013; Mayer *et al*., 2012). Second, their proximity to employees means they can influence attitudes and behaviours, such as affective commitment and OCB (Bos-Nehles and Meijerink, 2018; Mayer *et al*., 2012). While this stream of research is important, there is still a dearth of studies on how leadership, particularly ethical leader behaviours, could impact HPWS in contexts such as Pakistan healthcare, where resources are limited and unethical behaviours are rife (Fareed *et al*., 2017; Shaheen *et al*., 2017). Thus, it makes intuitive sense to explore how ethical leader behaviours could manifest in this context and how they could influence HPWS by demonstrating the kinds of attitudes and behaviours valued by the organisation.

Brown *et al*. (2005, p. 120) define ethical leadership as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making". Further, ethical leadership is viewed as both a personal trait of supervisors and a set of behaviours (Brown *et al*., 2005). As role models, ethical leaders maintain high ethical standards by demonstrating fairness, integrity, honesty, and openness (Brown *et al*., 2005). Subsequent studies have shown that ethical leadership positively influences employees and organisational performance (Abuzaid, 2018; Bedi *et al*., 2016; Mayer *et al*., 2012; Walumbwa *et al*., 2011). However, the effects of ethical leadership may differ depending on the situation or context and even due to the characteristics of followers (Ahn *et al*., 2018; Gok *et al*., 2017). Thus, our study addresses call to explore the impact of ethical leadership at the supervisory level in developing countries to better understand how ethical leaders behave in different situations (Ahn *et al*., 2018; Babalola *et al*., 2019; Bedi *et al*., 2016; Gok *et al*., 2017; Mo and Shi, 2017). Based on the discussion above, we propose the relationships between HPWS, ethical leadership, and employee attitudes (i.e. affective commitment) and behaviours (i.e. OCB) in the two case study hospitals, as depicted in Figure 1 below.

Hypotheses development

Social exchange theory (Blau, 1964) argues that employee behaviours and relationships are formed based on the principles of reciprocity and reward. Reciprocity refers to the gains an

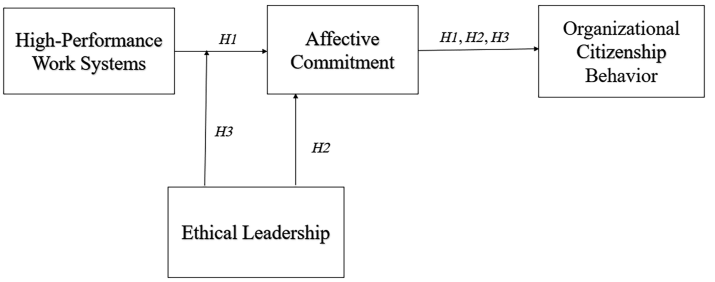

Figure 1. The proposed research framework. Source: Authors' own creation

organisation offers its employees, with expectations for the obligation to return the favour by indulging in behaviours that benefit the organisation. SET provides a valuable lens to examine how positive experiences influence employee behaviours in the form of HPWS and relationships in the form of ethical leadership at the supervisory level. Our theoretical framework, anchored on SET, suggests that employees who perceive that their organisation invests in them are more likely to reciprocate by engaging in activities that benefit their organisation. Furthermore, employees who perceive their supervisors as ethical leaders, as evidenced by fair decision-making and modelling ethical practices and behaviours, are more likely to align their behaviours with those of their leaders. Accordingly, we present three indirect hypotheses. First, we posit that affective commitment will mediate the relationship between HPWS and OCB. Second, we propose that affective commitment will mediate the relationship between ethical leadership and OCB. Finally, we argue that ethical leadership will be a significant moderator in the relationship between HPWS and affective commitment to subsequently influence OCB.

The mediating role of affective commitment between HPWS and OCB

One of the challenges in the HPWS literature is to better understand the complex process that leads to improved organisational outcomes, commonly referred to as the Black Box (Jiang and Messersmith, 2018; Messersmith *et al*., 2011). Research has linked HPWS to employee positive attitudes and behaviours, improving organisational performance (Jiang and Messersmith, 2018; Kloutsiniotis and Mihail, 2018; Mayer *et al*., 2012; Sun *et al*., 2007). However, the lack of consensus and the ambiguities regarding the mechanisms by which HPWS lead to better performance outcomes warrant further research (Cooke *et al*., 2019; Gürlek and Uygur, 2021). For example, attitudes such as affective commitment, defined as "an employee's emotional attachment to, identification with, and involvement in, the organisation" (Allen and Meyer, 1990, p. 1), is a critical outcome of HPWS (Kehoe and Wright, 2013; Sun *et al*., 2007). Therefore, more research is required to understand better how HPWS is related to affective commitment, particularly in sectors such as healthcare, where improved affective commitment can lead to better patient outcomes and job performance. Similarly, expanding our understanding of the relationship between HPWS and employee behaviours such as OCB, which are known to enhance job performance, is essential. OCB is defined as "individual behaviour that is discretionary, not directly or explicitly recognised by the formal reward system, and that in the aggregate promotes the effective functioning of the organisation" (Organ, 1988, p. 4).

Research shows that HPWS can positively influence employee affective commitment (Kehoe and Wright, 2013; Sun *et al*., 2007), and AC can significantly and positively impact performance in government organisations (Hodgkinson *et al*., 2018). In healthcare in the Netherlands, Boselie (2010) found that HPWS led to improved affective commitment and OCB, while AC and OCB were positively related. Messersmith *et al*. (2011) found that

affective commitment mediated between employee perceptions of HRM practices (HPWS) and employee behaviours. Neves *et al*. (2018) reported that affective commitment significantly mediated the relationship between HR practices and intentions to resist change. Thus, it is plausible that while HPWS could directly influence OCB, it is feasible that HPWS would first influence employee affective commitment and then impact employee OCB. Based on this argument, we hypothesise that:

H1. Affective commitment positively mediates the relationship between HPWS and OCB

The mediating role of affective commitment between ethical leadership and OCB

Ethical leader behaviours are linked to the development and enhancement of employee affective commitment and OCB (Abuzaid, 2018). For example, Abuzaid (2018) found a significant and positive relationship between ethical leadership and affective commitment based on bank employees in Jordan. Similarly, Yang and Wei (2018) reported that organisational commitment mediated the relationship between ethical leadership and OCB in China. Arguably, followers who perceive their leaders as ethical are more likely to view their workplace as ethical and are motivated to put extra effort into their work and engage less in unethical behaviours (Bedi *et al*., 2016; Mayer *et al*., 2012; Mo and Shi, 2017; Walumbwa *et al*., 2011). In Pakistan, ethical leadership has been linked to improved employee performance in the public education sector (Khokhar and Zia-ur-Rehman, 2017) and is helpful in mitigating unethical behaviours in public hospitals (Yasir and Rasli, 2018). In another Pakistani study, Ahmad *et al*. (2019) found a positive relationship between supervisor ethical leadership style and employee OCB in the fast-moving consumer goods sector. From these studies, it is plausible that while ethical leader behaviour directly influences OCB, it is best explained by first influencing affective commitment, and this relationship would then lead to the demonstration of OCB. Therefore, we hypothesise that:

H2. Affective commitment positively mediates the relationship between ethical leadership and OCB.

The moderating role of ethical leadership in the relationship between HPWS and affective commitment to impact OCB

Studies have shown that HPWS and ethical leadership, separately, positively influence employee attitudes and behaviours (Bedi *et al*., 2016; Combs *et al*., 2006; Kehoe and Wright, 2013; Kloutsiniotis and Mihail, 2018; Mayer *et al*., 2012; Walumbwa *et al*., 2011; Yasir and Rasli, 2018). Evidence from the healthcare sector consistently reports that encouraging desired attitudes and behaviours leads to improved patient care and hospital performance (Bartram *et al*., 2014; Fan *et al*., 2014; Kloutsiniotis and Mihail, 2018; Robbins and McAlearney, 2018; Zhang *et al*., 2013).

Based on SET and the contextual challenges, we argue that despite the potential effectiveness of HPWS in public healthcare, the implementation of HPWS would be highly challenging due to poor management and weak implementation issues (Callen *et al*., 2013; Government of Pakistan, 2023; Khurshid, 2010; Kurji *et al*., 2016). To strengthen the impact of HPWS on employee affective commitment and OCB, we argue that ethical leaders at the supervisory level have the potential to become role models, implement HPWS at the department level, and then act as a bridge between senior management and employees. Neves *et al*. (2018) argued that affective commitment significantly mediated the relationship between HR practices and intentions to resist change. However, this relationship was moderated (influenced) by ethical leadership, meaning that the relationship was significant when ethical leadership was high but became insignificant when ethical leadership was low. In the Pakistani healthcare sector context, we argue that ethical leadership will be a significant moderator in the relationship between HPWS and affective commitment and influence the impact on OCB, as ethical leadership will further strengthen the relationship. Therefore, we hypothesise that:

H3. Ethical leadership moderates the indirect effect of HPWS on OCB through affective commitment, such that the indirect effect is stronger when ethical leadership is perceived higher than when ethical leadership is perceived lower.

Methodology

Sample and data collection

This study adopted a case study design for an in-depth investigation (Stake, 1995; Yin, 2018) by purposively selecting two large public tertiary hospitals in Punjab, Pakistan, to improve our understanding of the HRM issues at the micro level. Subsequently, a large-scale survey was employed to gather data from front-line doctors and nurses in these two hospitals. Following Ali *et al*. (2024), we captured the perspectives of our participants on their experience of HPWS, ethical leadership, affective commitment, and OCB in their hospitals. We have used the pseudonyms Peace Hospital and Hope Hospital to preserve the anonymity of these hospitals. The total population of front-line doctors and nurses was approximately 1,541 (Peace Hospital) and 2,373 (Hope Hospital), working across three shifts in both hospitals. A convenience sampling approach was deployed using cross-sectional data similar to Ahmad and Umrani (2019) due to the challenge of reaching busy health professionals. Front-line doctors in government hospitals include House-Officers (HOs) and Post-Graduate Residents (PGRs), whereas, for nurses, staff nurses were categorised as front-line nurses. However, there were difficulties differentiating between front-line and non-front-line doctors and nurses due to the cultural norms of a collectivist society and the respect for seniors. For example, sometimes it was not culturally comfortable and acceptable to leave anyone out of the team while distributing the survey. Moreover, front-line doctors and nurses were often accompanied by their immediate supervisors in the ward, and visible differentiation was not always clear. However, the survey allowed participants to choose their designation, and we excluded non-frontline doctors and nurses from the study. The data were collected in two months from November to December 2018. No incentives were provided for the participants, as this was voluntary participation.

In Peace Hospital, 500 surveys were distributed across different departments, and 358 were returned (response rate 71.6%). In Hope Hospital, 900 surveys were distributed across different departments, and 704 surveys were returned (response rate 78.2%). Subsequently, 92 and 106 surveys, from a non-relevant sample comprising nine different categories of doctors and nurses, were removed from Peace and Hope Hospitals, respectively. Therefore, after following the extensive data cleaning process and excluding non-frontline doctors and nurses from the data, 266 and 548 responses were considered usable for Peace and Hope Hospitals, respectively.

Measures and controls

The survey comprised validated measures of the four research variables. HPWS was measured using a 36-item scale (Zacharatos *et al*., 2005) based on seven dimensions: selective hiring, extensive training, teamwork and decision-making, information sharing, status differentials, job quality, and job security. Since the purpose was not to examine the best HR practice but rather utilise these HR practices as a bundle to create a synergistic impact, HPWS was considered a composite variable for hypothesis testing (Ang *et al*., 2013; Bartram *et al*., 2014; Mihail and Kloutsiniotis, 2016). However, HPWS was considered a higher-order construct for EFA and CFA. The sample item for the scale was "My hospital places a great deal of importance on team development". Ethical leadership was measured using a 10-item scale (Brown *et al*., 2005). The sample item for the scale was "My immediate in charge makes fair and balanced decisions". Affective commitment was measured using a 6-item scale (Meyer *et al*., 1993), and the sample item for the scale was "I will be very happy to spend my whole career in this hospital". OCB was measured using a 16-item scale based on two dimensions

(Lee and Allen, 2002) and was analysed as a composite variable. The sample item for the scale was "I assist other colleagues with their work". For HPWS, affective commitment, and OCB, employees rated their own experiences, feelings, and behaviours, which are deemed appropriate for variables where employees themselves are considered the best source (Conway and Lance, 2010). However, for ethical leadership, employees did not report about themselves; instead, they rated their perception of their supervisors. Notably, all the scales adapted showed high reliability scores ($\alpha > 0.80$) except affective commitment, with the alpha coefficient for affective commitment getting further improved to 0.72 (in the case of Peace Hospital) and 0.75 (in the case of Hope Hospital) after the model re-specification. We also obtained data on demographic variables, including gender, age, experience, and job status, which impact employee attitudes and performance (Meyer *et al*., 2002). Subsequently, these were used as control variables in this study. However, none of the effects were significant at 95%; only the job status and hospital experience had a significant impact on affective commitment in Hope Hospital, and hence, this effect was controlled for hypothesis testing.

Descriptive and correlation statistics

For Peace Hospital, the sample included 177 doctors and 89 nurses, and for Hope Hospital, 276 doctors and 272 nurses. Almost all the front-line doctors were working as "trainees" in both hospitals for 1–5 years, while the vast majority of nurses were in regular employment. In Peace Hospital, 82% of the participants (doctors and nurses) had less than 5 years of experience, and the majority (91%) was aged 18–31. Females outnumbered men, with 68% female employees compared to 32% male employees. Similarly, for Hope Hospital, 83.9% of the participants (both doctors and nurses) had less than five years of experience in the hospital, and the majority (92.2%) were aged between 18 and 31 years. Females outnumbered men, with 77% of female employees compared to 23% of male employees. As shown in Table 1 below, all the bivariate correlations were significant, moderately and positively related.

Results

Model testing, constructs validity, and common method bias

To further analyse the adequacy of the scales adopted, confirmatory factor analysis (CFA) was performed to confirm the factors theorised in the study using AMOS software. As shown in Table 2, six alternative models of CFA were analysed; model five produced better goodness-of-fit (GOF) indices, yet the GOF indices did not meet the threshold criteria. It was observed that negatively worded items consistently created understanding issues and led to confusion for the participants and, hence, could be misinterpreted and, therefore, were removed from the analysis (Hughes, 2009; Merritt, 2012; Wong *et al*., 2003). Thus, the model-specification approach was applied to remove redundant items, and finally, a reasonable model fit was achieved based on

Table 1. Descriptive statistics, standard deviation, reliability, and correlation

	Hospital	Mean	SD	1	2	3	4
HPWS (1)	Peace	3.04	0.37	*0.81*			
	Hope	3.05	0.40	*0.81*			
Ethical Leadership (2)	Peace	3.81	0.68	0.34**	*0.90*		
	Hope	3.75	0.72	0.43**	*0.91*		
Affective Commitment (3)	Peace	3.35	0.67	0.49**	0.32**	*0.69*	
	Hope	3.51	0.70	0.40**	0.27*	*0.72*	
OCB (4)	Peace	3.78	0.51	0.41**	0.52**	0.50**	*0.85*
	Hope	3.90	0.51	0.43**	0.42**	0.43**	*0.87*

Note(s): $N = 266$ (Peace Hospital), $N = 548$ (Hope Hospital), *$p < 0.05$, **$p < 0.01$
Source(s): Authors' own creation

Table 2. Confirmatory factor analysis

Model	Factor details	Hospital	CMIN/DF	*P*-value	CFI	TLI	SRMR	RMSEA	PClose
1	*One Factor*	Peace	3.179	0.000	0.364	0.342	0.114	0.091	0.000
		Hope	4.90	0.000	0.399	0.381	0.10	0.084	0.000
2	*Two Factors*	Peace	2.669	0.000	0.513	0.496	0.102	0.079	0.000
		Hope	4.30	0.000	0.493	0.477	0.09	0.078	0.000
3	*Three Factors*	Peace	2.447	0.000	0.578	0.563	0.098	0.074	0.000
		Hope	3.64	0.000	0.594	0.581	0.09	0.069	0.000
4	*Four Factors*	Peace	2.326	0.000	0.615	0.600	0.091	0.071	0.000
		Hope	3.51	0.000	0.615	0.602	0.08	0.068	0.000
5	*CFA 2nd Order (Before specif.)*	Peace	2.112	0.000	0.678	0.664	0.095	0.065	0.000
		Hope	2.89	0.000	0.71	0.70	0.08	0.06	0.00
6	*CFA 2nd Order (After specif.)*	Peace	1.568	0.000	0.907	0.900	0.067	0.046	0.863
		Hope	2.195	0.000	0.908	0.900	0.056	0.047	0.948

Note(s): One factor combined the constructs of HPWS, ethical leadership, AC, and OCB
Two factors include constructs of HPWS (factor 1), ethical leadership, AC and OCB (factor 2)
Three factors include constructs of HPWS (factor 1), ethical leadership (factor 2), AC and OCB (factor 3)
Four factors include separate constructs of HPWS (factor 1), ethical leadership (factor 2), AC (factor 3) and OCB (factor 4)
CFA 2nd order includes separate constructs of HPWS (factor 1 – 2nd order), ethical leadership (factor 2), AC (factor 3), and OCB (factor 4 – 2nd order)
Source(s): Authors' own creation

various GOF indices. As shown in Table 2, for Peace Hospital, the model fit indices were Chi-square ratio degree of freedom (χ^2/df) = 1.568, comparative fit index (CFI) = 0.907, Tucker-Lewis's index (TLI) = 0.900, standardised root mean square residual (SRMR) = 0.067, root-mean-square error of approximation (RMSEA) = 0.046, and PClose = 0.863. As shown in Table 2, for Hope Hospital, the model fit indices were CMin/Df = 2.195, CFI = 0.908, TLI = 0.900, SRMR = 0.056, RMSEA = 0.047, and PClose = 0.948. These results indicate that our hypothesised five-factor model produced an acceptable fit.

Hypotheses 1 and 2 were tested using structural equation modelling in AMOS 28.0 software, and hypothesis 3 was analysed using Model 7 of the PROCESS macro 4.0 in SPSS, developed by Hayes (2022). As shown in Table 3, H1, affective commitment positively and significantly mediated (full mediation for Peace Hospital and partial mediation for Hope Hospital) the relationship between HPWS and OCB (β = 0.42, BootLLCI = 0.390 and BootULCI = 0.573, and $p < 0.001$ for Peace Hospital, β = 0.37, BootLLCI = 0.664 and BootULCI = 0.880, and $p < 0.001$ for Hope Hospital). Similarly, for hypothesis 2, affective commitment positively and significantly mediated (full mediation for both hospitals) the

Table 3. Results hypothesis effects

Path	Hospital	β	*t*-value	*P*-value	BootLLCI	BootULCI
Hypothesis 1	Peace	0.42	8.79	0.001	0.390	0.573
HPWS → AC → OCB	Hope	0.37	12.07	0.001	0.664	0.880
Hypothesis 2	Peace	0.21	6.70	0.001	0.073	0.154
EL → AC → OCB	Hope	0.06	8.86	0.008	0.009	0.047
Hypothesis 3	Peace	0.13	2.45	Significant	0.035	0.244
HPWS → EL → AC → OCB	Hope	0.02	1.14	Not Significant	−0.015	0.063

Source(s): Authors' own creation

relationship between ethical leadership and OCB (β = 0.21, BootLLCI = 0.073 and BootULCI = 0.154, and $p < 0.001$ for Peace Hospital and β = 0.06, BootLLCI = 0.009 and BootULCI = 0.047 and $p < 0.01$ for Hope Hospital).

Our third hypothesis of moderated mediation for Peace Hospital was also significant as zero did not lie between the lower and upper limits of bootstrapping confidence intervals (β = 0.13, BootLLCI = 0.035 and BootULCI = 0.244) in the test of the index of moderated mediation (Hayes, 2022). It is also evident from Figure 2 that employee affective commitment is higher when supervisors show a higher level of ethical leadership, and affective commitment is lower when supervisors practice a lower level of ethical leadership. In the case of Hope Hospital, the third hypothesis of moderated mediation was insignificant as zero lies between the lower and upper limits of bootstrapping confidence intervals (β = 0.02, BootLLCI = –0.015 and BootULCI = 0.063) in the test of the index of moderated mediation (Hayes, 2022). This indicates that ethical leadership as a conditional variable did not significantly impact the relationship between HPWS and affective commitment to influence OCB.

Discussion

In this paper, we explored the application of HPWS coupled with ethical leadership at the supervisory level and how they influenced employee attitudes (affective commitment) and behaviours (OCB). By studying the complementary nature of HPWS and ethical leadership, we were able to unpack how ethical leadership and HPWS predicted employee attitudes and behaviours within two public hospitals in Pakistan. First, we found that many front-line employees positively experienced some level of HPWS, and those employees were more likely to feel committed to the organisation and, in turn, were more likely to engage in OCB. This suggests that affective commitment played an important role in influencing the OCB of front-line employees and supports the findings of other healthcare studies (Ang *et al*., 2013; Bartram *et al*., 2014; Boselie, 2010; Fan *et al*., 2014). This is an important finding that supports evidence from the Pakistani healthcare sector (Faisal *et al*., 2023), indicating that leaders,

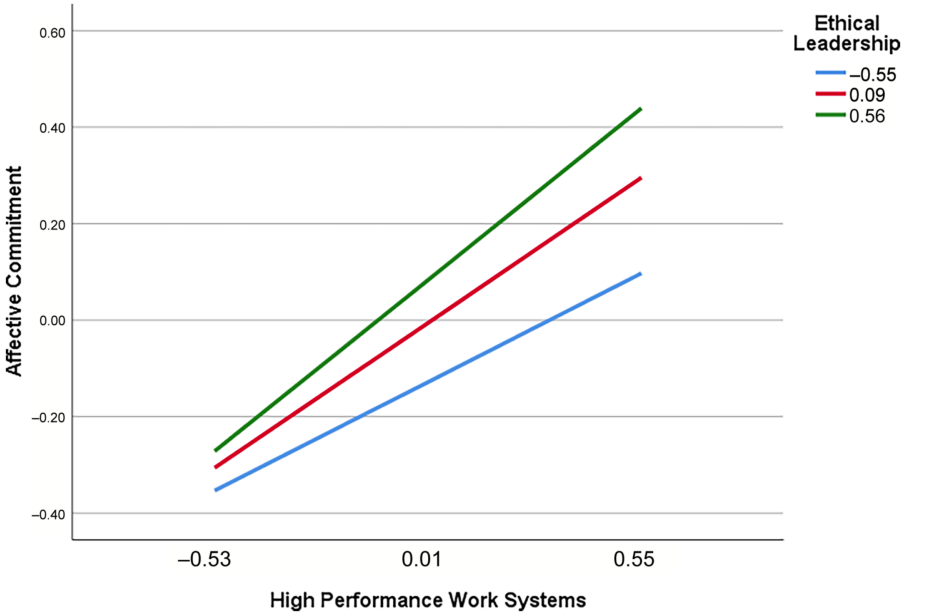

Figure 2. Moderated Mediation Effect – Peace Hospital. Source: Authors' own creation

despite recognising the limitations of HRM structures and processes in their hospitals, felt that the introduction of sophisticated HRM practices could make a positive difference in employee attitudes and behaviours.

Second, we found that affective commitment also influenced front-line employees OCB when they perceived their supervisor as an ethical leader and a good role model who earned their respect and loyalty. We found that the perception of the immediate supervisor as an ethical leader shaped follower behaviour, leading to employees becoming more committed at the workplace and exhibiting more citizenship behaviours. This finding also supports earlier literature where ethical leadership is positively related to employee affective commitment and OCB (Abuzaid, 2018; Ahmad and Umrani, 2019; Bedi *et al*., 2016; Khokhar and Zia-ur-Rehman, 2017; Mo and Shi, 2017; Walumbwa *et al*., 2011). Again, in the context of widespread corruption and unethical behaviours, this finding is significant for Pakistani policy and decision-makers (Shaheen *et al*., 2017; Yasir and Rasli, 2018). Moreover, given that 92% of the employees in this study were under 32 years of age and 84% had fewer than five years of work experience, experiencing ethical leadership early in their careers could have long-term beneficial effects on their professional practice. In contrast, experiencing unethical behaviours as the norm could have long-term detrimental outcomes.

Finally, we found in Peace Hospital that ethical leadership positively and significantly moderated the mediating relationship between HPWS and affective commitment and that HPWS and ethical leadership in combination impacted affective commitment, leading to higher OCB. This finding extends the theory in the field of both HPWS and ethical leadership, specifically about the role of supervisors in implementing HPWS (Bos-Nehles and Meijerink, 2018; Bos-Nehles *et al*., 2013). We do not have rich evidence from previous studies as to whether both HPWS and ethical leadership in combination have an impact on influencing employee affective commitment and OCB. Instead, we provide supporting evidence from studies that examined both HPWS and ethical leadership separately, which found improved organisational outcomes, particularly in the form of employee attitudes and behaviours (Ahn *et al*., 2018; Ang *et al*., 2013; Bartram *et al*., 2014; Bedi *et al*., 2016; Fan *et al*., 2014; Gok *et al*., 2017; Mo and Shi, 2017). Therefore, we infer that based on SET, the role of ethical supervisors is critical in the given context to influence employee affective commitment, leading to higher OCB, in particular, where affective commitment was also influenced by HPWS.

However, in the case of Hope Hospital, ethical leadership did not moderate the mediating relationship between HPWS and affective commitment, where both HPWS and ethical leadership in combination did not significantly impact affective commitment. While this hypothesis was not supported, it is likely that other factors reduced the effects of ethical leadership. Hope Hospital is the largest hospital in the province, and patients have high expectations of quality care from experienced clinicians. It is possible that a number of senior doctors in Hope Hospital take advantage of their reputation to establish their own private practice in private hospitals, which, while against the rules, is common in some hospitals. These "moonlighting" behaviours are problematic because these senior doctors are absent during their working hours, leading to a lack of learning opportunities for junior doctors and modelling poor behaviours rather than being a good role model. Another possible reason could be because of patient demand, work intensification in Hope Hospital for doctors and nurses is high, limiting the influence of ethical leaders. This is in line with Faisal *et al*. (2023), who identified a range of factors in Pakistani public hospitals, including overburdened staff, significant status differentials between junior and senior employees, salary issues, and poor working conditions, which can undermine the work of ethical leaders. We argue that in-depth case study research can identify these contextual conditional variables that influence employee attitudes and behaviour. Moreover, Hope Hospital is one of the leading hospitals in the province and attracts junior doctors and nurses who desire to work there. We could speculate that these employees already have a high affective commitment to the organisation and high expectations of their leaders, which limits the impact at the supervisory level. Hence, we argue that despite the potential benefits of HPWS, sophisticated HRM practices need to build on a

strong well-resourced base. These contextual factors potentially impact ethical leaders at the supervisory level. If these supervisors do not have the resources tailored to departmental needs, OCB can be undermined.

Theoretical implications

Findings from our study extend the theoretical understanding of how ethical leadership and HPWS manifest in two public hospitals in Pakistan. As such, our study provides an important contribution to the field of public healthcare in a non-Western and developing country context. Specifically, our study extends the field by converging the disciplines of HRM and leadership. It thus offers new insights into the interactional relationship between HPWS and ethical leadership and their impact on employee attitudes and behaviours. As far as we know, our study is one of the first to examine the combined effects of HPWS and ethical leadership within one study, except for Lin *et al*. (2023) and Neves *et al*. (2018), who included different variables in a different context. Neves *et al*. (2018) examined the influence of commitment-based HR practices, ethical leadership, the relationship of affective commitment to change, and the intention to resist change. Whereas Lin *et al*. (2023) focused on the mediated moderation effect of ethical leadership on service-oriented OCB from different companies in Taiwan.

Thus, our study adds to the theoretical understanding of how HPWS, coupled with ethical leadership, influences affective commitment and OCB in front-line employees in the public health sector of a developing country. Moreover, the study improves our understanding of the importance of contextual factors in effectively implementing HRM practices. In the Pakistani healthcare context, the study contributes to examining HR autonomy (Suhail and Steen, 2021) and understanding the institutional context (Faisal *et al*., 2023). Based on the inconsistent results, we argue that perhaps other types of leadership styles, such as servant leadership or paternalistic leadership, might be more valuable in organisations like Hope Hospital. This could also indicate that within the given context, it is challenging to adhere to ethical standards and leadership at the departmental level due to the sheer size of the organisation, coupled with weak accountability and structural issues.

Practical and managerial implications

We identify practical and managerial implications for the Pakistani government, the Punjab Province, and hospital leaders in their commitment to improving public health outcomes. First, at the provincial level, decentralised decision-making on a range of people management functions (such as recruitment and selection, performance management, reward, and training and development) at the hospital level could lead to greater autonomy and accountability at the local level. Second, the Federal and Provincial governments could invest in developing HRM at all levels of the public health sector. This could be done by professionalising the HRM function by establishing integrated HRM departments with clear roles and responsibilities. Third, hospitals and the government need to focus on improving employee work experiences through sophisticated HRM practices such as HPWS, which in turn have the potential to yield better outcomes through more committed employees. Finally, ethical leadership needs to be valued, celebrated, and rewarded. Government and hospital leaders could introduce programs through which ethical leaders could be identified, encouraged, and promoted, thus instilling ethical behaviour in front-line employees. That way, public hospitals could be managed more efficiently and effectively and provide high-quality healthcare to the people of Pakistan.

Lastly, structural challenges and contextual issues can undermine the influence of ethical leaders on the attitudes and behaviours of front-line doctors and nurses. To ensure the optimum utilisation of available financial and human resources, there should be greater transparency across the hospital and the autonomy to make quicker decisions to successfully implement HPWS in their hospitals. Hospitals should have the opportunity to customise their training and bundle of HR practices and promotion of ethical leaders to optimise quality patient care. Pilot

leadership programs could be developed and curated to meet the challenges and needs of each hospital to assess and implement effective leadership styles.

Limitations and directions for future research

It is important to highlight some limitations emanating from this study. Data was only collected from two public hospitals. While this is a limitation, Yin (2018) and Stake (1995) have argued that even a single case can be acceptable as it offers in-depth insight. Moreover, the sample size was 814 for two hospitals, which could be considered adequate. The data collected were self-reported and cross-sectional and may suffer from common method bias (Podsakoff *et al.*, 2024). However, difficulties in collecting data from a complex research setting meant that cross-sectional data was the best outcome. To overcome CMB issues, we applied a common latent factor approach in AMOS, which did not identify any CMB issues. Despite that, future research should utilise longitudinal and experimental designs to improve the credibility of the causality of the leadership-HPWS relationship. Additionally, future studies could benefit from utilising non-self-report measures or from multiple sources such as supervisors and co-workers. Further, contextual factors such as the type of organisation, the role and responsibilities of the leaders, follower characteristics, organisational culture, and values may be considered to explore the impact of ethical leadership. Lastly, we recommend analysing the perceptions and experiences of doctors and nurses separately, particularly in a context that offers different employment terms and conditions for both groups.

Conclusion

The study investigated the role of HPWS and ethical leadership at the supervisory level and its effect on the affective commitment and OCB of front-line employees in two public hospitals in Pakistan using a case study design. Based on SET, we provided a theoretical framework for understanding HPWS and its implementation in the presence of ethical leaders at the supervisory level to influence employee attitudes and behaviours. The results showed that affective commitment is an important employee attitude that positively and significantly mediates the relationships between HPWS and OCB and between ethical leadership and OCB. Thus, when ethical leaders demonstrate their support for their subordinates, their subordinates perceive their supervisors as ethical leaders, strengthening the subordinate affective commitment and OCB. Our study offers two key takeaways. Firstly, affective commitment is an important underlying mechanism for improving positive organisational behaviours that lead to improved organisational performance. Secondly, the study found evidence of ethical leadership as an important boundary condition for the leadership-HPWS relationship to create synergies and alignment between employees and the management, thus leading to improved employee and organisational outcomes.

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