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Enhancing Innovative Work Behavior through Well-being-Oriented HRM: The Roles of Work Engagement and Servant Leadership

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Abstract

This study investigates how well-being-oriented human resource management (HRM) practices shape employees' innovative work behavior, incorporating work engagement as a mediating mechanism and servant leadership as a moderating factor. Data were gathered using a stratified sampling approach from five service and manufacturing sectors in Pakistan. After screening for incomplete, duplicate, and outlier responses, 278 valid cases were retained for analysis. Structural equation modeling was carried out using AMOS 21.0 to test the proposed hypotheses. The results show a significant association between well-being-oriented HRM practices and innovative work behavior, with work engagement serving as a partial mediator in this relationship. Additionally, servant leadership was found to moderate the link between well-being-oriented HRM practices and work engagement. These findings offer practical value for service organizations and policymakers seeking to foster innovation in a rapidly evolving competitive environment. The study advances the literature by highlighting an underexplored perspective on how well-being-focused HRM practices promote innovative behavior and by underscoring the role of employee engagement in this process. It also addresses a gap in quantitative research on the effects of well-being-oriented HRM approaches on innovation within developing-country contexts.

Keywords: Well-being-oriented HRM, Servant leadership, Work engagement, Innovative work behavior

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Introduction

Human Resource Management (HRM) is widely acknowledged as a cornerstone of organizational effectiveness, as supported by prior research [1, 2]. Yet, recent scholarship points to a recurring contradiction: once firms meet their short-term productivity needs, HRM often loses priority, despite an increasing push toward sustainable people management practices that can secure long-term organizational stability [3]. Many organizations have historically viewed HRM as expendable, reducing it during financially difficult periods [4].

In the past decade, industries such as banking, technology and services have begun to reposition HRM as a strategic function rather than a financial burden. This shift reflects growing recognition that strong HRM systems are essential for competitiveness and sustained performance [5]. As firms face continuously shifting market demands, HRM has become central to organizational adaptation and innovation.

Encouraging innovative work methods is now considered vital for long-term success. While workplace changes can sometimes disrupt operations [6, 7], HRM approaches that prioritize employee well-being tend to cultivate innovation-oriented behaviors. Persistent ineffective workplace routines [8] further illustrate the need for renewed HRM strategies. Although employee well-being has appeared in previous research as an important organizational signal, its function is often

understated. Because such signals shape trust between employers and employees, HRM practices must affirm that workers are valued, thereby encouraging positive behavioral responses [9].

Prior studies consistently demonstrate that HRM practices are instrumental in stimulating employees' innovative behavior [10, 11]. Innovation enables firms to compete, respond to rapid environmental changes and enhance employee-driven improvements [1, 12]. Agarwal [13] argues that organizations must deliberately nurture creativity, as it strengthens both individual development and organizational capability. Employees, who possess deep practical knowledge of processes and services, are often positioned to detect inefficiencies and propose novel solutions. Their capacity to innovate increases when they are actively involved in tasks that encourage idea generation and implementation [12].

Servant leadership has gained increasing attention as a people-centered leadership philosophy that contrasts with traditional hierarchical models. By emphasizing the needs of followers, servant leaders help align organizational goals with employees' interests [14, 15]. Research shows that this leadership style enhances engagement and innovative behavior [16, 17], fosters ethical work climates [18], and strengthens organizational values in ways that support competitive differentiation [19]. Through their focus on employee development and empowerment, servant leaders create conditions that encourage ethical conduct and extend positive values beyond the organization [15, 20].

Although work engagement did not initially receive significant scholarly attention, it has emerged as a central factor in shaping employee performance. Engaged employees are more motivated and demonstrate stronger commitment to organizational goals, contributing positively to performance outcomes [21, 22]. As such, many organizations increasingly view engagement as a strategic priority. Evidence further suggests that engaged employees are more likely to exhibit innovative behavior, which reinforces the importance of engagement in maintaining competitive advantage [1, 13]. Persistent dysfunctional work practices continue to undermine engagement, highlighting the need for HRM practices that strengthen well-being and support productive work environments [8, 23].

Although prior HRM research has examined its influence on engagement and innovation, less is known about how well-being-focused HRM practices foster innovative work behavior through underlying psychological processes. Well-being-oriented HRM aims to enhance employees' capabilities, strengthen their commitment and encourage innovation [24]. Responding to calls for further investigation, this study explores work engagement as a mediating mechanism linking well-being-oriented HRM practices to innovative work behavior. Focusing on a range of service-based organizations, it offers new theoretical and practical insights into how HRM can stimulate innovation by supporting employee engagement [5, 25-27].

This study addresses Guest's [28] call for a refreshed theoretical lens that emphasizes the role of HRM in improving employee well-being. Guest [28] frames well-being-oriented HRM as a set of organizational practices designed to deepen employee investment, provide meaningful and engaging work, cultivate supportive physical and social conditions, elevate employee voice, and ultimately improve organizational outcomes [25]. Building on this perspective, the present study investigates how these practices shape employees' innovative work behavior, which represents a critical downstream consequence of well-being-focused HRM. Low levels of employee engagement remain a widespread challenge across global contexts [12]. Guided by recommendations from Salas-Vallina *et al.* [2] and Costa *et al.* [14], this research incorporates work engagement as a mediating mechanism and servant leadership as a moderating factor to better understand how well-being-oriented HRM supports innovative employee behavior.

Literature review and hypotheses

Theoretical support: social exchange theory

Social Exchange Theory (SET), first articulated by Blau [29] and later extended in organizational research [2], offers a useful foundation for explaining how employees respond to organizational practices. SET proposes that workplace interactions operate through reciprocal exchanges in which individuals attempt to balance what they receive with what they contribute. Sanhokwe and Chinyamurindi [22] emphasize that employees' engagement levels are shaped by the degree to which they feel connected to and valued by their organization, influencing their willingness to reciprocate through positive work behavior.

In practice, reciprocal exchanges are evident when organizations invest in employees through training, development opportunities, and supportive resources. Employees, perceiving these investments as meaningful, often respond with stronger commitment, higher effort or contributions that exceed formal role requirements. Gouldner [30] further notes that the perceived significance of organizational support determines the strength of employees' reciprocation. When employees feel respected and recognized, their sense of gratitude encourages deeper attachment to the organization.

The present study extends this line of reasoning by drawing on Grant *et al.*'s [31] framework to examine well-being-oriented HRM through the lens of SET. Salas-Vallina *et al.* [2] show that practices addressing employees' security, development and training needs generate positive attitudes and behaviors consistent with SET's principles. Under this framework, supportive HRM practices cultivate positive psychological states, which in turn promote desirable outcomes such as innovative work behavior.

This perspective is reinforced by Eisenberger *et al.* [32] and Salas-Vallina *et al.* [2], who argue that mutual employer-employee exchanges enhance both performance and well-being. Guest [28] similarly highlights that well-being-oriented HRM

strengthens alignment between employee needs and organizational goals, thereby encouraging innovation. By adopting SET, this study seeks to clarify how well-being-focused HRM contributes to innovation and workplace productivity, offering insights relevant to scholars and practitioners alike.

Well-being-oriented HRM and innovative work behavior

Innovative work behavior involves the intentional creation, promotion and implementation of new ideas aimed at improving performance at the individual or organizational level [12]. Amabile and Pratt [33] further define this behavior as a process through which employees generate solutions that address organizational challenges. Creative contributions can emerge at any organizational level, and firms increasingly recognize the value of employees' innovative efforts. Within HRM scholarship, well-being-oriented HRM has gained attention for its role in fostering such behaviors [26, 34]. These practices not only support employee well-being but also stimulate innovative capabilities that enhance performance outcomes.

As a strategic function, HRM strongly influences employees' ability to engage in innovation. Well-being-oriented HRM creates conditions that encourage information sharing, collaboration and creative thinking [35]. Employees often interpret HR practices as a signal that the organization is investing in their development, reinforcing the strategic importance of HRM [12]. Gong *et al.* [36] and Morrison (1996) similarly argue that HR practices create an exchange dynamic in which employees feel compelled to reciprocate organizational support, often through improved performance or innovative contributions. These discussions lead to the first hypothesis:

Hypothesis 1: There is a positive relationship between well-being-oriented HRM and innovative work behavior.

Well-being-oriented HRM and work engagement

Well-being-focused HRM practices provide multiple benefits to employees, such as development opportunities, empowerment, fair rewards and recognition. Recognition is especially influential, as it reinforces feelings of worth and appreciation. Through these practices, employees come to see themselves as valued contributors, which strengthens their commitment and productivity. Górak-Sosnowska and Piwowar-Sulej [6] note that HRM practices help organizations assess and support employee commitment. Afsar *et al.* [16] also highlight that organizations should actively invest in HRM initiatives because engaged employees tend to be more innovative. Kura *et al.* [23] add that HRM practices that motivate employees are closely linked to engagement and productivity. Employees who are actively involved in their work environment demonstrate greater enthusiasm, skill application and resilience.

Truss *et al.* [37] describe engagement as the degree to which individuals invest emotional and cognitive energy into their tasks. Employees who feel energized at work are better able to perform their responsibilities [38, 39]. Engagement reflects how much employees care about their roles. According to Bakker *et al.* [40] and Sanhokwe and Chinyamurindi [22], those who experience high work enthusiasm tend to exert more effort and achieve better outcomes. Afsar *et al.* [16] conceptualize engagement as the expression of one's authentic self in work roles, reinforcing a sense of belonging and connection.

Kura *et al.* [23] suggest viewing work engagement as a core dimension of employee engagement. Kahn [41] further explains that when employees are fully engaged, they draw upon emotional, cognitive and physical resources to contribute meaningfully. HRM plays a central role in helping employees balance professional and personal demands, thereby supporting their creative contributions [12]. High engagement strengthens focus and increases the likelihood of creative behavior. This leads to the following hypothesis:

Hypothesis 2: There is a positive relationship between well-being-oriented HRM and work engagement.

Work engagement and innovative work behavior

Work engagement captures employees' positive psychological connection to their work roles [42] and is widely recognized as a strong predictor of job performance. It comprises three components identified by Schaufeli *et al.* [43]: dedication, absorption and vigor. Dedication reflects a sense of pride, fulfillment and personal development at work. Absorption describes being so immersed in one's tasks that time passes quickly. Vigor refers to the energy and mental resilience employees bring to their jobs [40]. Engagement has been linked to a wide range of positive outcomes, including well-being, prosocial behavior and favorable work attitudes [44, 45].

Beyond being a marker of job satisfaction, engagement is intertwined with employees' performance, creativity and commitment [21, 46]. Low engagement often results in decreased effort and reduced productivity, whereas high engagement encourages employees to contribute fully, generate new ideas and strengthen innovative efforts within the organization [16, 39]. A highly engaged workforce is more likely to develop and apply innovative solutions, making engagement a critical element in sustaining an innovative organizational culture.

Engagement reflects an ongoing exchange between employees and their organization that supports the pursuit of shared objectives. Employees experiencing high engagement demonstrate elevated energy, motivation and persistence, which allow them to manage demanding tasks more effectively [38]. According to Schaufeli and Bakker [39], when job demands are high and resources are insufficient, employees may experience burnout, declining health, turnover intentions and disengagement.

Adequate resources, however, increase satisfaction, decrease turnover and strengthen engagement. This suggests that organizations seeking optimal performance must invest in practices that reinforce engagement.

While earlier studies tended to emphasize individual-level predictors of innovation, more recent research highlights the importance of broader organizational factors such as teamwork, communication, supportive relationships and collective involvement [12, 21, 33, 35]. Afsar *et al.* [16] emphasize that organizations fostering team-based collaboration, engagement and active idea sharing are more likely to see improvements in innovative behavior. These insights support the following hypothesis:

Hypothesis 3:There is a positive relationship between work engagement and innovative work behavior.

Work engagement as mediator

Prior studies suggest that work engagement serves as a mediating mechanism linking well-being-oriented HRM practices to employees' innovative behavior. As presented in **Figure 1**, well-being-oriented HRM practices have a direct influence on employee innovation, and engagement strengthens this relationship. Recent findings reinforce the idea that engagement is central to stimulating innovative work behavior [11, 21]. When HRM practices focus on employee well-being, they not only improve engagement but also instill a sense of confidence and psychological security, enabling employees to take initiative and explore new ideas. This underscores the importance of adopting HR practices that prioritize well-being in order to enhance innovation. HRM functions such as recruitment, development and compensation remain foundational to building an engaged, productive and innovative workforce across all organizational contexts.

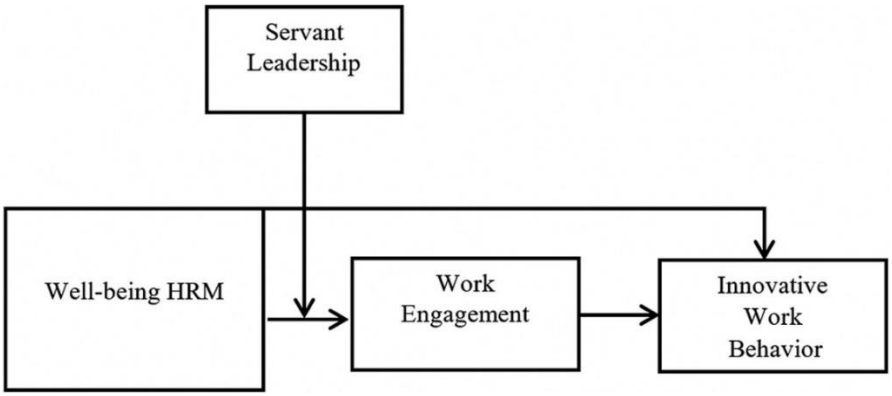

Figure 1. Conceptual framework of the study

Organizations must show a clear commitment to integrating well-being-oriented HRM practices and ensuring these practices function cohesively. This interconnected approach highlights the value of coordination and collaboration across the organization. Implementing well-being-oriented HRM practices produces several beneficial outcomes, one of the most prominent being increased employee engagement. In line with this, Kura *et al.* [23] reported a positive link between HR practices and engagement. Extending this line of reasoning, we argue that engagement serves as the mechanism through which well-being-oriented HRM enhances employees' innovative behaviors. This leads to the following hypothesis:

Hypothesis 4: Work engagement mediates the relationship between well-being-oriented HRM and innovative work behavior.

Servant leadership as moderator

A servant leader places the needs, development and well-being of employees at the forefront, actively working to support their growth. Such leaders are recognized for a genuine commitment to serving others [15]. They take responsibility for advancing employees' interests, value their contributions and invest meaningfully in their professional development, which fosters a stronger sense of social responsibility. By creating developmental opportunities and empowering employees, servant leaders cultivate greater inclusion and confidence [42].

As awareness of servant leadership continues to grow, it is increasingly viewed as a leadership philosophy grounded in ethical and moral principles [17]. Current research positions servant leadership as a transformative shift away from self-focused leadership styles toward approaches that emphasize leader–follower relationships [15, 18]. Within this framework, leaders accept responsibility for addressing the moral needs of their followers, thereby contributing to organizational performance [20].

A substantial body of research has examined the link between servant leadership and work engagement [17], with consistent evidence showing that servant leadership positively influences engagement levels. This association has significant implications for organizational success. Further studies also report a strong positive correlation between servant leadership and engagement [47], and some highlight mediating pathways that clarify how this relationship unfolds [48]. Because servant leadership promotes ethical behavior, respect and supportive leader–employee relationships, employees are more inclined to

trust and respond to leaders who demonstrate empathy, encouragement and authentic concern for their development. These outcomes are shaped directly by leader behavior. Based on this reasoning, we present the following hypothesis:
Hypothesis 5: Servant leadership moderates the relationship between well-being-oriented HRM and work engagement.

Materials and Methods

Psychological paradigm and research design

The psychological paradigm forms the theoretical foundation of this study, offering a set of assumptions, theories and methodological principles that guide the research process [49]. As noted by Saunders *et al.* [50], this paradigm provides the basis for developing a coherent research design. A positivist stance was adopted, as it aligns well with quantitative research conducted in naturalistic environments [51]. Positivism supports a deductive approach, enabling researchers to test established theoretical assumptions through empirical analysis [52]. In keeping with this framework, data were collected using a stratified sampling strategy across five service and manufacturing industries in Pakistan.

Data collection and sample

Data were gathered using a structured questionnaire administered across five industries in Pakistan, including information technology, footwear, ceramics, banking and healthcare, following the approach of Salas-Vallina *et al.* [2]. In this study, the term "service industries" encompasses sectors that integrate service-based activities such as design, customization and customer interaction into their operations. These industries play an important role in the region's economic development and illustrate the growing convergence of product and service elements.

Survey-based quantitative methods were used to collect responses from Lahore, Gujranwala, Gujrat, Sialkot and Kharian. Ethical approval for the study was secured from the Office of Research, Innovation and Commercialization (ORIC) at GIFT University under reference number ORIC-2023-039. Careful attention was given to ensuring participant comfort, minimizing bias and respecting cultural norms throughout data collection.

One of the researchers took an active role in administering the survey, building rapport with participants and communicating the voluntary nature of participation. Respondents were informed that their data would remain confidential, in accordance with the recommendations of Bougie and Sekaran [52], who emphasize clarity and trust-building to encourage accurate responses.

The online survey produced 315 usable entries. Following the guidance of Tabachnick and Fidell [53], missing data and outliers were examined before analysis. Based on Hair *et al.* [54], 27 responses were removed due to substantial missing values. Mahalanobis distance (D^2) was then applied to detect multivariate outliers [53], resulting in the exclusion of 10 additional cases. The final dataset consisted of 278 valid responses.

Demographic results showed that 72.3% of respondents were male and 27.7% female. Age distribution indicated that 47.2% were between 20 and 30 years, 41.3% between 31 and 40 years, and 11.5% between 41 and 50 years. Regarding education, 2.2% held intermediate qualifications, 41.7% had a bachelor's degree, 29.9% held a master's degree, and 10.1% held an MS/MPhil. Employment status indicated that 77.6% were in permanent positions, while 23.4% were contractual employees. Sector-wise, 14.7% worked in information technology, 20.1% in ceramics, 20.9% in footwear, 23.7% in banking and 20.6% in healthcare. By location, 16.9% were from Lahore, 20.9% from Gujrat, 5.4% from Sialkot, 42.8% from Gujranwala and 14.0% from Kharian **(Table 1)**.

Table 1. Demographic profile of the respondents

Category	Frequency	Percentage
Gender		
Male	201	72.3
Female	77	27.7
Age Group		
20 − 30 years	131	47.2
31 − 40 years	115	41.3
41 − 50 years	32	11.5
Qualification		
Intermediate	6	2.20
Bachelor	116	41.7
Master	83	29.9
MS/MPhil	28	10.1
Others	45	16.1
Nature of Job		
Permanent	213	76.6
Contractual	65	23.4

Type of Industry		
Information Technology	41	14.7
Ceramics	56	20.1
Footwear	58	20.9
Banking	66	23.7
HealthCare	57	20.6
Job Role		
Top Level Management	16	5.80
Middle Level Management	77	27.7
Line-Manager/Supervisor	33	11.9
Staff Member	127	45.6
Worker	25	9.00
Total Years of Experience		
Less than 1 Year	53	19.1
1-4 Years	127	45.7
5-9 Years	61	21.9
More than 10 Years	37	13.3
Name of City		
Lahore	47	16.9
Gujrat	58	20.9
Sialkot	15	5.4
Gujranwala	119	42.8
Kharian	39	14.0

Instrument of the study

Well-being HRM

This study used the well-being-oriented HRM scale developed by Cooper *et al.* [25] and Salas-Vallina *et al.* [2]. Although the original instrument consisted of six dimensions and 31 items, we incorporated five of those dimensions and a total of 17 items to assess well-being-oriented HRM practices. Example items included statements such as: "Things look secure for me in the future in this organization," "I have the chance to attend formal training programs to learn new skills and knowledge," and "I can actively offer suggestions to improve work procedures or processes." The dimensions used in this study were training and development, employment security, information sharing, job quality and managerial relationships **(Table 2)**. The scale showed strong internal consistency, with a Cronbach's alpha of 0.91.

Table 2. Instrument assessment

Variable	Items (Paraphrased)	Factor Loading	Reliability
Well-being-HRM practices			**0.91**
Employment security	I feel confident about my future job stability in this organization.	0.618	
	I can remain with this organization as long as I desire.	0.574	
	Job security feels nearly assured in my current role.	0.657	
	The company is dedicated to providing long-term job security.	0.696	
Training and development	I have opportunities to participate in formal training to acquire new skills and knowledge.	0.650	
	The organization invests sufficient resources in employee training.	0.661	
	The organization prioritizes employee training and growth.	0.623	
	We receive the training required to maintain high performance standards.	0.714	
Job quality	I am encouraged to propose ideas for enhancing work methods or processes.	0.566	
	Employee opinions substantially shape management decisions.	0.687	
	Staff feel included in key organizational decisions.	0.615	
Information sharing	Our team maintains high-quality information exchange.	0.692	
	I gain fresh facts, perspectives, and ideas from coworkers.	0.606	
	In work meetings, we avoid sharing new information and stick to what is already known.	0.544	
Relationship with manager	My supervisor provides support and direction when needed.	0.606	
	I feel valued and acknowledged for excellent performance.	0.658	
	My direct manager offers assistance during problems.	0.489	
Work engagement			**0.82**

Vigor	I feel full of energy while at work.	0.530	
	I feel strong and energetic in my job.	0.594	
	Mornings make me eager to start work.	0.597	
Dedication	I am passionate about my work.	0.636	
	My role motivates and inspires me.	0.647	
	I take pride in my professional contributions.	0.713	
Absorption	Intense work brings me happiness.	0.583	
	I become fully engrossed in my tasks.	0.632	
	Work easily sweeps me away.	0.566	
Servant leadership			**0.80**
	My leader quickly detects work-related issues.	0.509	
	My leader prioritizes my professional growth.	0.759	
	I would turn to my leader for personal issues.	0.679	
	My leader stresses the value of community contribution.	0.610	
	My leader places my needs above their own.	0.758	
	My leader allows me autonomy in managing challenging situations.	0.576	
Innovative work behavior			**0.85**
	I propose novel approaches to meet goals or objectives.	0.713	
	I develop practical new ideas to boost performance.	0.732	
	I frequently adopt original problem-solving methods.	0.597	
	I recommend new methods to enhance quality.	0.711	
	I serve as a strong source of creative concepts.	0.681	
	I devise innovative solutions to challenges.	0.674	
	I demonstrate creativity at work when opportunities arise.	0.655	

Servant leadership

To assess servant leadership, the study used the six-item instrument created by Liden *et al.* [19]. The items capture how leaders attend to employees' needs, such as noticing when something at work is amiss, offering personal support when needed and stressing the value of contributing to the broader community. The measure showed dependable internal consistency, with a Cronbach's alpha of 0.80.

Work engagement

Employees' engagement levels were measured with the nine-item scale designed by Schaufeli *et al.* [55], which reflects the dimensions of vigor, dedication and absorption. Illustrative statements include "I feel full of energy at work," "I find my job inspiring," and "Intense work makes me feel happy." The scale demonstrated acceptable reliability, yielding a Cronbach's alpha of 0.82.

Innovative work behavior

Innovative work behavior was evaluated using seven items drawn from the frameworks of Scott and Bruce [56] and Zhou and George [57]. These items capture behaviors such as generating workable new ideas, proposing improvements to quality and suggesting alternative approaches to meet organizational objectives. The measure was highly reliable, with a Cronbach's alpha of 0.85.

Data analysis

Measurement model evaluation

The study followed a two-step SEM procedure, separating the validation of the measurement model from the testing of structural relationships, consistent with Byrne [58]. In the first stage, CFA was performed to confirm whether items adequately represented their intended constructs. Reliability and validity checks followed the criteria outlined by Hair *et al.* [54]. After this, the structural model was estimated to examine how well-being-oriented HRM predicts work engagement and innovative work behavior.

Measurement model testing

The measurement model specifies how each latent construct is reflected in its observable indicators [58]. All items related to well-being-oriented HRM, work engagement, servant leadership and innovative work behavior were included in the CFA. The resulting model fit statistics were: χ^2 (n = 278) = 1602.63, df = 696, χ^2/df = 2.30, GFI = 0.744, CFI = 0.807, AGFI = 0.713 and RMSEA = 0.06. As shown in **Table 3**, these values indicate that the model fits the data at an acceptable level.

Table 3. Results of measurement model

χ^2	Df	χ^2/ df	GFI	AGFI	CFI	RMSEA

Model	1602.63	696	2.30	0.744	0.713	0.807	0.06

Instrument reliability and validity

The reliability and validity of each construct were examined through Confirmatory Factor Analysis (CFA), following the procedures recommended by Byrne [58]. To assess measurement consistency and accuracy, Cronbach's alpha coefficients, Composite Reliability (CR), and Average Variance Extracted (AVE) were computed. Cronbach's alpha (α) was used to evaluate internal consistency, with values below 0.50 considered unacceptable, 0.50–0.60 classified as marginally acceptable, and values above 0.70 regarded as satisfactory for analysis. In this study, all constructs demonstrated strong reliability, with alpha values ranging from 0.80 to 0.91, indicating a high degree of internal consistency.

Convergent and discriminant validity were assessed using the criteria outlined by Fornell and Larcker [59]. According to Hair *et al.* [54], the AVE for each construct should be at least 0.50, and the CR should exceed 0.60. Convergent validity was further confirmed by ensuring that standardized factor loadings were above 0.30 and statistically significant at $p < 0.001$ [60]. The analysis indicated that all constructs met these thresholds, confirming both the convergent and discriminant validity of the measures. Overall, the results demonstrated that the measurement instruments were robust and suitable for subsequent structural analysis **(Table 4)**.

Table 4. Convergent and discriminant validity of the constructs

	CR	AVE	ASV	WBHRM	IWB	SL	WE
WBHRM	0.910	0.577	0.446	0.614			
IWB	0.858	0.646	0.331	0.421	0.682		
SL	0.803	0.614	0.481	0.846	0.471	0.643	
WE	0.829	0.557	0.516	0.668	0.771	0.712	0.597

WBHRM: well-being HRM; IWB: innovative work behavior; SL: servant leadership; WE: work engagement.

Evaluation of the structural model

The hypotheses were tested using a structural equation modeling (SEM) framework, integrating well-being-oriented HRM as the predictor, work engagement as the mediating variable, and innovative work behavior as the outcome. All latent variables—both exogenous and endogenous—were included in the model to assess their interrelationships. The model demonstrated satisfactory fit, with indices as follows: χ^2 (n = 278) = 1122.64, df = 492, χ^2/df = 2.28, GFI = 0.790, AGFI = 0.761, CFI = 0.832, and RMSEA = 0.06. These results indicate that the proposed structural model adequately represents the observed data, confirming its suitability for examining the hypothesized relationships **(Table 5)**.

Table 5. Results of structural model

	χ^2	Df	χ^2	GFI	AGFI	CFI	RMSEA
Model	1122.64	492	2.28	0.790	0.761	0.832	0.06

Direct relationship outcomes

To test the proposed hypotheses, a two-stage analytical approach was adopted, combining Structural Equation Modeling (SEM) with Confirmatory Factor Analysis (CFA), in line with the recommendations of Hair *et al.* (2010), using AMOS 21.0. Hypothesis 1 (H1) suggested that well-being-oriented HRM practices positively influence employees' innovative work behavior. The HRM construct encompassed five dimensions: training and development, job security, information sharing, job quality, and managerial relationships. Analysis results indicated a meaningful positive association between well-being-oriented HRM and innovative work behavior ($\beta = 0.176$, $p < 0.05$; **Table 6**). These findings support H1, demonstrating that organizations' investments in employee well-being are directly linked to an increase in innovative behaviors among staff.

Table 6. Results of direct relationship.

Hypotheses	Paths	Estimates	S. E	CR	*p*	Result
H1	WBHRM → IWB	0.176	0.087	2.013	0.04	significant
H2	WBHRM → WE	0.518	0.118	4.378	***	significant
H3	WE → IWB	0.780	0.125	3.623	***	significant

***$p < 0.001$.

WBHRM: well-being HRM; IWB: innovative work behavior; WE: work engagement.

Relationships Between Well-Being-Oriented HRM, work engagement, and innovative work behavior

Hypothesis 2 (H2) explored the effect of well-being-oriented HRM on employee work engagement. The analysis revealed a strong and statistically significant positive relationship ($\beta = 0.518$, $p < 0.05$), indicating that practices focused on employee well-being—such as job security, training opportunities, and fostering a supportive work environment—effectively enhance

employees' engagement levels. The acceptance of H2 underscores the pivotal role of well-being-oriented HRM in cultivating an engaged workforce. By prioritizing these practices, organizations not only improve employees' sense of value and well-being but also encourage greater dedication, which subsequently fosters a culture of continuous improvement and innovation [2, 55]. These insights are particularly valuable for HR professionals seeking to design policies that both enhance engagement and drive organizational innovation.

Hypothesis 3 (H3) proposed a positive association between work engagement and innovative work behavior. The results strongly supported this hypothesis, showing a significant positive effect ($\beta = 0.780$, $p < 0.05$). This finding suggests that employees who are more engaged in their work are more likely to generate, propose, and implement innovative ideas. High engagement motivates employees to be proactive, experiment with new approaches, and adopt creative solutions, thereby reinforcing the importance of fostering engagement as a key driver of workplace innovation. These results are consistent with prior research, highlighting the central role of engagement in promoting innovative outcomes [2, 55].

Mediating role of work engagement

The mediating effect of work engagement (H4) was examined using SEM in AMOS 21.0, following procedures for assessing indirect effects [61]. SEM offers the advantage of simultaneously evaluating measurement and structural relationships, improving the accuracy of fit indices [61, 62]. In the proposed model, well-being-oriented HRM served as the independent variable, work engagement as the mediator, and innovative work behavior as the dependent variable. The mediation model **(Figure 2)** depicts three pathways: WBHRM → WE, WE → IWB, and WBHRM → IWB, enabling the assessment of both direct and indirect effects of HRM practices on innovation through employee engagement.

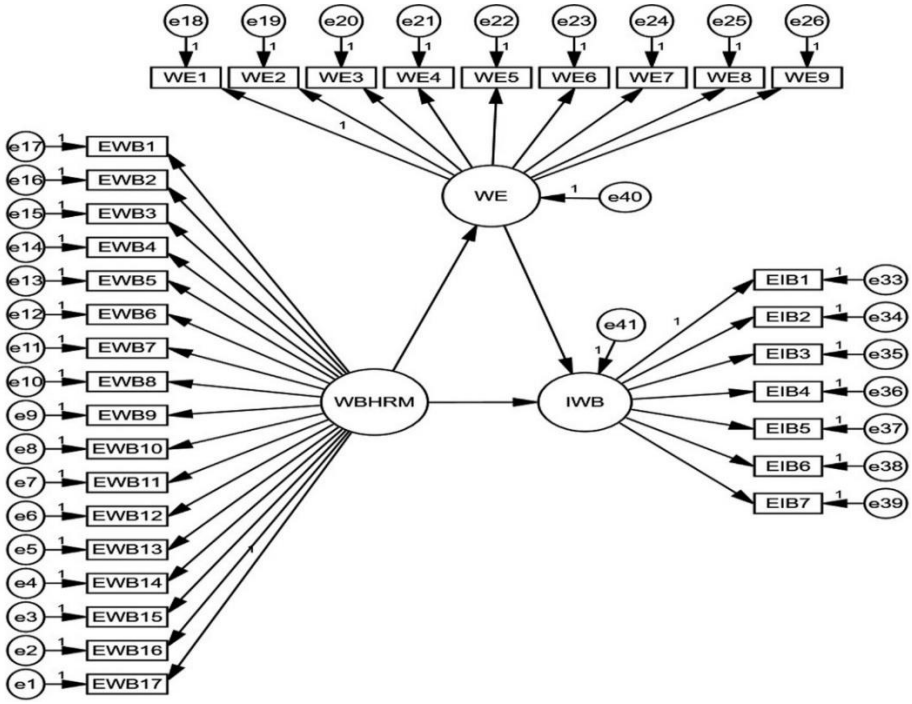

Figure 2. Mediation model

Table 7 presents the results for the mediation model, which is a crucial component of this study's analysis. Before including the mediating variable, the findings highlight a substantial direct association between well-being-oriented HRM (WBHRM) and innovative work behavior (IWB) ($\beta = 0.570$, $p < 0.001$). This indicates that well-being-oriented HRM directly influences employees' innovative work behaviors, emphasizing the role of HRM practices in developing a culture of innovation within the organization.

Table 7. Mediating result

	Estimate	SE	CR	*p*	Results
Direct relationship					
WBHRM → IWB	0.570	0.113	5.023	*	significant
Indirect relationship					Results
WBHRM → WE	0.518	0.118	4.378	*	significant
WE → IWB	0.780	0.125	3.623	*	significant
WBHRM → IWB	0.176	0.087	2.013	0.04	significant

***$p < 0.001$.

WBHRM: well-being-oriented HRM; IWB: innovative work behavior; WE: work engagement.

Mediation by work engagement

Introducing work engagement (WE) as a mediating variable altered the pattern of relationships observed in the model. The path from well-being-oriented HRM (WBHRM) to work engagement was strongly significant ($\beta = 0.518$, $p < 0.05$), indicating that HRM practices designed to enhance employee well-being effectively boost engagement levels. Similarly, the pathway from work engagement to innovative work behavior (WE → IWB) was also significant ($\beta = 0.780$, $p < 0.05$), highlighting that employees who are highly engaged tend to demonstrate greater initiative and creativity in implementing new ideas.

Notably, the direct effect of WBHRM on innovative work behavior ($\beta = 0.176$, $p < 0.05$) remained significant after including work engagement in the model. This suggests that engagement partially mediates the relationship: while part of the influence of HRM practices on innovation operates through increased engagement, a direct effect of well-being-oriented HRM on innovative behavior persists independently. These results underscore the dual pathway through which HRM practices contribute to innovation—both directly and indirectly via engagement.

Moderating effect of servant leadership

To examine the moderating role of servant leadership, Structural Equation Modeling (SEM) was employed using AMOS 21.0. SEM is particularly suited for assessing complex models with multiple latent variables, enabling an in-depth analysis of interactions such as leadership behaviors affecting employee engagement [63].

Figure 3 illustrates the moderation framework, where servant leadership (SL) is hypothesized to influence the strength of the relationship between WBHRM and work engagement (WE). In this analysis, WBHRM functions as the predictor, WE as the outcome, and SL as the moderating variable. The interaction term (WBHRM × SL) was evaluated to determine how servant leadership shapes the impact of well-being-oriented HRM practices on employee engagement, providing insight into the conditions under which HRM strategies are most effective in promoting engaged and innovative employees.

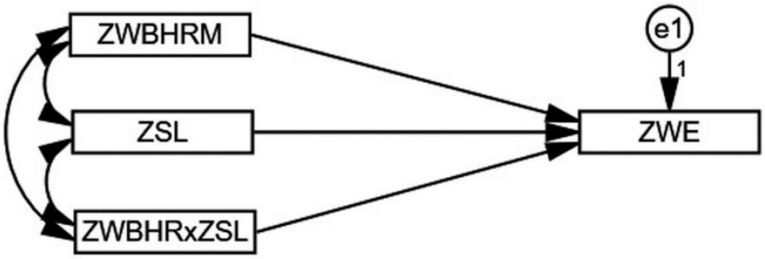

Figure 3. Moderation model

Moderating role of servant leadership

A moderator is considered effective when the interaction between the predictor and the moderator significantly influences the outcome [62]. In this study, the interaction between well-being-oriented HRM (WBHRM) and servant leadership (SL) exhibited a statistically significant positive effect on work engagement ($\beta = 0.094$, $p < 0.05$). This indicates that the presence of servant leadership amplifies the influence of HRM practices aimed at enhancing employee well-being. Put differently, when leaders demonstrate servant-oriented behaviors—such as prioritizing employees' needs, fostering ethical practices, and offering genuine support—the positive impact of HRM initiatives on engagement is strengthened. These findings underscore the importance of leadership style in maximizing the effectiveness of HRM strategies **(Table 8)**.

Table 8. Results of moderation analysis

Relationship	Estimate	SE	CR	*p*	Results
WBHRM → WE	0.352	0.070	5.011	***	
SL → WE	0.368	0.068	5.433	***	
WBHRM × SL → WE	0.094	0.040	2.356	0.018	significant

***$p < 0.001$.
WBHRM: well-being-oriented HRM; WE: work engagement; SL: servant leadership.

The findings underscore the critical value of combining leadership development with well-being-focused HRM initiatives. Organizations that foster servant leadership qualities in their leaders while implementing HRM practices that prioritize employee well-being are likely to see stronger improvements in work engagement. This integrated approach not only strengthens individual engagement and promotes a more supportive workplace culture but also contributes to overall organizational effectiveness. By aligning servant leadership with well-being-oriented HRM, organizations can generate a reinforcing cycle that enhances employee satisfaction, motivation, and broader performance outcomes.

Results and Discussion

Despite extensive research on the impact of well-being-oriented HRM practices on employee innovation, there remains limited understanding of how engagement mediates this relationship [26, 27, 64]. This study addresses this gap by investigating employee engagement as a mechanism linking well-being-focused HRM practices to innovative behaviors in Pakistan's service sector. The sector was chosen due to its pivotal role in economic activity and its ongoing challenges related to workforce capabilities and skill development. Additionally, this research examines the moderating influence of servant leadership, shedding light on how leadership can shape the effectiveness of HRM initiatives [5, 25].

The strength of the relationship between well-being-oriented HRM and engagement was found to vary across organizations, highlighting the necessity of consistent HRM strategies. Leaders, especially in contexts where formal HR systems are limited, play a vital role in promoting engagement and encouraging creative contributions. By supporting employees and modeling proactive behavior, leaders can enhance the outcomes of HRM practices, demonstrating that engagement is shaped by both organizational policies and leadership behavior.

The results confirm all hypotheses and contribute to HRM literature in several ways. Firstly, this study introduces a five-dimensional framework for well-being-oriented HRM, including managerial support, job security, training and development, job quality, and information sharing. Secondly, it reinforces the three-dimensional structure of work engagement—vigor, dedication, and absorption. Thirdly, the findings illustrate how combining HRM practices with engagement can foster innovative work behavior. Lastly, the moderating role of servant leadership shows that leaders who prioritize employee needs and ethical behavior strengthen the relationship between HRM practices and engagement.

The analysis reveals that well-being-oriented HRM practices have the strongest effect when applied collectively rather than in isolation. Practices that support skill development, ensure job security, foster managerial relationships, and encourage information sharing work together to produce a synergistic impact on engagement and innovation. This integrated approach highlights the importance of viewing HRM as a coordinated system rather than a collection of isolated activities, offering practical insights for HR practitioners and organizational leaders seeking to enhance engagement and innovation [21, 25, 26].

Servant leadership emerged as a key factor in strengthening the HRM–engagement relationship. Supervisors who exhibit servant leadership qualities—such as empathy, support, and ethical conduct—enhance the positive effects of HRM practices on engagement. Employees perceive these leaders as genuinely invested in their growth and well-being, which encourages greater participation, reduces skepticism toward HRM initiatives, and sustains engagement over time. This finding extends prior research on leadership and engagement by showing that servant leadership not only reinforces positive HRM outcomes but also mitigates potential negative perceptions [17, 47, 64].

Overall, this study presents a cohesive framework demonstrating that well-being-oriented HRM practices, supported by servant leadership, can cultivate a highly engaged and innovative workforce. Organizations that integrate leadership development with HRM initiatives create an environment where employees are motivated, valued, and empowered to contribute creatively. These insights have practical implications for designing HRM systems that enhance both employee satisfaction and organizational performance.

Theoretical contributions and practical implications

This research offers several notable contributions to HRM literature, particularly concerning well-being-oriented practices and their effect on employees' innovative behavior. Firstly, it highlights a crucial social mechanism through which well-being-focused HRM enhances employee engagement. By examining the mediating role of work engagement between well-being-oriented HRM practices and innovative work behavior in Pakistan's service sector, the study provides new insights into how HRM practices influence employees' knowledge, skills, and attitudes [13]. This understanding advances the theoretical discourse on the interplay between HRM and innovation in organizational settings [26, 27].

Secondly, the findings carry significant practical relevance for organizations across service and manufacturing industries. The study underscores the importance of adopting well-being-oriented HRM strategies to foster innovative employee behavior and sustain engagement. Unlike traditional skill-based training approaches, this research advocates a continuous, holistic HRM framework that integrates daily practices focused on employee well-being. Such an approach not only nurtures sustained engagement but also drives organizational innovation and enhances competitiveness in dynamic business environments [25].

Thirdly, this study reinforces the centrality of work engagement in HRM research, providing evidence that higher engagement correlates with greater innovative work behavior. The results support the principles of social exchange theory and demonstrate that combining well-being-oriented HRM with servant leadership can significantly enhance employees' innovation. These findings encourage HR practitioners to adopt strategies that promote both engagement and creativity, contributing to a forward-thinking organizational culture that values employee participation and proactive contribution [10].

Limitations and future research directions

Despite its contributions, this study has several limitations that present opportunities for future research. The primary focus was on the influence of well-being-oriented HRM practices on innovative employee behavior. Prior studies suggest that HRM strategies prioritizing employee well-being often yield stronger positive outcomes than those focused solely on organizational goals [7]. However, some HRM interventions may unintentionally have negative effects on well-being, highlighting the need for further exploration of alternative HRM designs [25, 65, 66].

The study's scope was confined to five service sectors within a single geographic region, limiting the generalizability of the results. Future studies could expand the research across different industries, regions, and countries to examine contextual variations in the impact of well-being-oriented HRM on innovative behavior. Additionally, organizational culture, demographic characteristics, and workforce diversity may influence the applicability of the findings, suggesting avenues for further investigation.

Moreover, future research could focus on smaller organizations with less formalized HR practices to understand how line managers contribute to fostering well-being and innovation [2]. Examining alternative leadership approaches, such as ethical leadership, and dissecting the distinct dimensions of well-being-oriented HRM may also yield valuable insights. Further studies on the psychological mechanisms underlying these HRM practices would enrich understanding of their effects on employee engagement and creativity.

Conclusion

This study demonstrates that well-being-oriented HRM practices positively influence employees' innovative work behavior, with work engagement acting as a significant mediator. The findings also reveal that servant leadership moderates the relationship between HRM practices and engagement, amplifying the positive outcomes. Leaders who embody servant leadership principles—by prioritizing employee growth, demonstrating ethical behavior, and taking responsibility for their team's development—enhance engagement and foster a supportive work environment conducive to innovation.

These insights carry practical implications for organizational leaders, emphasizing that integrating servant leadership with well-being-focused HRM strategies can be a powerful mechanism to enhance employee creativity, engagement, and overall organizational performance. By aligning HRM initiatives with leadership approaches that prioritize employee welfare and development, organizations can build a more innovative, motivated, and sustainable workforce.

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