

Role of High-Performance Work System in Turnover Intention through Mediating Effect of Employee Outcomes

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ABSTRACT

Purpose—Many well-renowned companies adopted high-performance practices like GM, Google, etc. The main objective of this research study is to analyze the role of High-Performance Work System (HPWS) in turnover intentions through the mediating effect of employee outcomes of trust and job satisfaction.

Study Design/methodology/approach—The analysis is based on primary data, where 310 respondents from five big banks were consulted, and data were collected using convenience sampling. The study adopted cross cross-sectional design. CFA, correlation analysis, and regression analysis under first and second-order structural models were made.

Findings—The results of this research show that the firms using different practices under HPWS can enhance trust and job satisfaction to limit the turnover intentions of employees. This research is expected to enhance the knowledge of HPWS in the banking sector of Pakistan.

Practical Implications—It is also expected that it will add to the contribution in the sense that the firms that are not using HPWS can get the lesson on how they can reduce the transaction cost of employees' turnover intention.

Originality/value—The research, in South Asian countries and especially Pakistan, is on the deficient side about high-performance practices. Specifically, there is no such prominent study to examine the effect of HPWS on turnover intentions in Pakistan. This study will fill the gap by examining the banking sector regarding the High Performance with Turnover Intention through the mediating effect of employee outcomes.

Keywords: HPWS, turnover intention, employee outcome, trust, job satisfaction.

JEL Classification Codes: M12, D23, J30, J28, J63

1 | INTRODUCTION

In an organization, besides other tangible assets, the employees of the organization are the most essential assets. The quality of any organization's performance can be judged through human resource management (HRM), which is an important and critical function of a firm. According to [Pfeffer \(1994\)](#) and [Kochan and Dyer \(1993\)](#), HR reflects the main competitive advantage for organizations. The most prominent companies like Toyota, Apple, General Electric (GE), Google, and Singapore Airlines (SIA) have adopted HPWS (improved management systems that encourage the competence and commitment of employees), that resulted

in high productivity. Over the decades, organizational performance has been judged through HPWS under the contribution of HRM.

HPWS can be defined as “a system of HRM practices that increase the employees’ empowerment, knowledge, skills, and incentives that ultimately motivate them to achieve greater performance” ([Messersmith et al., 2011](#)). There are various HR practices under HPWS; however, Pfeffer introduced 16 HR practices for the first time in his model. In the subsequent research of [Pfeffer \(1998\)](#), these HR practices were reduced to seven practices only: Teamwork and decision-making’s decentralization, technology, employee security, hiring of new employees, extensive training, high compensation, and management planning and measurement.

However, [Huselid \(1995\)](#) reported that various HR practices under HPWS had led to the employee outcome in the form of positive employee behaviors and attitudes. The same employee outcomes in the form of motivation, organizational citizenship behavior, and trust have also been reported by [Kundu and Gahlawat \(2016\)](#) under HPWS. According to [Eisenberger et al. \(1997\)](#), the effectiveness of an organization is increased due to the adoption of HR practices (like creating a working environment, where employees get involved in the organization and work hard to achieve the goals that will lead to job satisfaction and the organization’s commitment) under HPWS.

In past studies, three different aspects have been analyzed regarding HPWS. As researchers claim, the “universalistic” viewpoint explains the concept of HPWS in a better way. In this study, to test the universalistic perspective, HR practices are selected for HPWS.

Various well-known human resource-related theories support HPWS, especially human capital theory, social exchange theory ([Blau, 1964](#)), and transaction cost theory. Human capital theory suggests that competitive advantages come from the resources that firms contain internally, i.e., the employees of the firms. In the same way, according to social exchange theory, investments should be made in employees in the form of extensive training, employee relations, and empowerment (i.e., HR practices under HPWS), to inspire employees to respond to the organization by showing positive behavior like trust and job satisfaction. Transaction cost theory suggests that the cost related to hiring new employees is very high (one of the aspects of transaction cost theory) against the skilled and experienced employees when they leave the organization. Because of this huge cost, various HR practices under HPWS have gained popularity to reap the outcome, like limiting employees not to leaving the organization.

To lower or limit the turnover rate of employees from the organization, research recommends implementing motivational strategies, as it is one of the most significant predictors for turnover intention ([Carmeli & Weisberg, 2006](#)). On the other hand, HPWS is ignored with reference to the employee outcomes like trust, motivation, and job satisfaction ([Farndale et al., 2011](#)).

In the study of [Ma et al. \(2020\)](#), they highlighted how HPWS affects individual outcomes in the context of social identity theory. Their results have shown that organizational identification fully mediates the link between HPWS, job performance, and turnover intention. According to ([Engström et al., 2025](#)), how work stress and job satisfaction affect turnover intention amongst general practitioners in China, results confirmed that stress and satisfaction significantly shape the turnover intention. In contrast, weak HR practices in Ghana’s banking sector weaken psychological attachment and increase turnover ([Zungbey et al., 2019](#)).

[Carberry et al. \(2025\)](#) examined how psychological ownership mediates the link between four different HR practices and employee outcomes in U.S. firms with employee stock ownership plans. Psychological ownership boosts commitment, reduces turnover intention. According to [Bai et al. \(2023\)](#), self-sacrificial leadership moderates the negative effects of HPWS.

Further, in the study ([Kundi et al., 2023](#)), it is observed how discretionary HRM practices influence employee attitudes and behaviors. The study ([Badru et al., 2024](#)) observed how HPWS, stewardship climate, and trust in supervisor shape employee voice behavior from the telecom sector in Nigeria. HPWS positively influences voice, whereas stewardship climate has a negative effect. Trust in a supervisor mediates and strengthens relationships.

According to [Nasurdin et al. \(2018\)](#), turnover among nurses threatens healthcare efficiency and effectiveness, making retention a key priority. This study examines how organizational commitment mediates the link between high-performance work practices (HPWPs) and turnover intention. Results show that performance appraisal and compensation reduce turnover intention through commitment. In the study, [Bakhtiar et al. \(2024\)](#) examined how HPWS overcomes the turnover intention in Kuala Lumpur from the tourism sector, focusing on the mediating roles of organizational justice and job embeddedness.

According to [Rubel et al. \(2021\)](#), HPWPs improve performance, enhance perceived organizational support, and reduce turnover intention. According to [Wang et al. \(2024\)](#), HPWS increases innovation performance in Chinese SMEs.

The study of [Berber and Gašić \(2024\)](#) examined how employee commitment mediates the relationship between compensation systems and turnover intentions in Serbia. They showed that compensation positively influences commitment and negatively affects turnover intentions, with commitment partially mediating. The study of [Xi et al. \(2021\)](#) inspected how employees' individual and collective perceptions mediate between HPWS and outcomes in Chinese firms. Data collected from 286 companies, results demonstrate that HPWS shapes perceptions that drive affective commitment, reduce turnover intention, and enhance performance.

[Luna-Arocas and Camps \(2007\)](#) proposed the model of HPWS and turnover intention and found a negative relationship. In the same line, [Ang et al. \(2013\)](#) and [García-Chas et al. \(2014\)](#) have found a negative relationship between HPWS and turnover intentions. [Fabi et al. \(2015\)](#) also reported a negative relationship. [Kundu and Gahlawat \(2016\)](#) observed negative relationships between these two variables.

([Haar & White, 2013](#); [Snape & Redman, 2010](#)) investigated how the adoption of HR practice (HPWS) can affect the outcomes of employees (OCB and employee retention). Similarly, HR practices under HPWS in the form of challenging work, extensive training, and greater empowerment send signals to the organization for its employees that the experiences, knowledge, abilities, and skills of employees are very important for the organization. That is the reasons organization invests in their employees in their welfare. As a result, trust building among employees evolved with employers and with their organization ([Wu et al., 2011](#)). The job satisfaction and organizational commitment come in the employees, when HR practices under HPWS are acknowledged and helpful to employees (that is, they are empowered in decision-making, get learning opportunities, and incentives & rewards).

Taking into account the researcher's work, the mediating effect is very important to investigate HPWS with turnover intention.

In South Asian countries, although few studies are available on HPWS. Nevertheless, in all these studies, the relationship between HPWS and turnover intention has not been researched in any South Asian country except in India. However, [Kundu and Gahlawat \(2016\)](#) analyzed the HPWS and turnover intentions through the mediating effect of behavioral and attitudes as employee outcomes by using the sample of 563 respondents of an Indian firm. In the same line, these variables, except trust, were also used as mediators between HPWS and a firm's performance in Pakistan by [\(Riaz, 2016\)](#). However, [Riaz \(2016\)](#) study ignored the mediating effect of employee outcomes between HPWS and turnover intention, instead of the firm's performance.

In some other studies, HPWS is discussed in the light of employee psychological outcomes. They concluded that the HR practices under HPWS) helped to develop the work behavior of employees. On the other hand, [Fareed et al. \(2016\)](#) have examined the moderating role of HPWS. In the past, most of the studies of HPWS and turnover intention were conducted in the context of the US and Western settings. However, in Pakistan, the majority of the studies regarding HPWS were about the HPWS and performance of the organization, like the studies of [\(Imran et al., 2015; Mahmood et al., 2017; Sattar et al., 2015; Siddique, 2016\)](#)

As no such prominent study exists in Pakistan in the context of HPWS and turnover intention. Therefore, this study will fill the gap in the literature to investigate the role of HPWS in turnover intention through the mediating effect of employee outcome. Therefore, it is essential to investigate the role of HPWS in turnover intention through the mediating effect of employee outcome (Trust and Job satisfaction).

- What is the impact of HR practices under HPWS on employee outcomes (trust and job satisfaction) individually and collectively?
- What is the impact of employee outcomes (trust and job satisfaction) on turnover's intention of employees?
- What is the impact of HPWS on the turnover intention of employees?
- What is the mediating effect of employee outcomes between HPWS and turnover's intention of employees?

As the literature is deficient in this area, this research is expected to contribute by enhancing the knowledge of HPWS and turnover intention of employees in banking sector firms of Pakistan. This study will discuss HR practices to create value of human capital so that not quit from the organization under the mediating effects of employee outcomes. It is also expected that it will add to the contribution in the sense that the firms that are not using HPWS can get the lesson from high-performance firms.

2 | LITERATURE REVIEW

Going through the literature review regarding HR practices under HPWS, diverse studies were seen emphasizing the adoption of HR practices under HPWS in competitive organizations. The increasing literature on "how HR practices affect firm performance" [\(Boselie & van der Heijden, 2024\)](#). To overcome the huge cost of turnover intention, various HR practices under HPWS have gained popularity to reap the outcome like to limit the employees not to leaving the organization. Because turnover of employees from an organization that is retention of employee is a big challenge that HR departments must face.

The linking of HR practices under HPWS and turnover intention of employees has been empirically researched extensively at the organizational level [\(Delery & Shaw, 2001\)](#). The study of [Rhoades et al. \(2001\)](#)

attempted to document the mediating effect of job satisfaction and commitment between the HR practices under HPWS and turnover intention. However, their study could not capture the mediating effects due to the selection of various HR practices under HPWS.

According to [Engström et al. \(2025\)](#), the study examines how work stress and job satisfaction affect turnover intention amongst general practitioners in China, by applying data collected through a survey. Results confirmed that stress and satisfaction significantly shape the turnover intention. In contrast, weak HR practices in Ghana's banking sector weaken psychological attachment and increase turnover ([Zungbey et al., 2019](#)).

([Carberry et al., 2025](#)) Examined how psychological ownership mediates the link concerning four different HR practices and employee outcomes in U.S. firms with employee stock ownership plans. They utilized data from 881 employees from US firms and found that information sharing, literacy training, and quality communication enhance psychological ownership. In turn, psychological ownership boosts commitment, reduces turnover intention. According to [Bai et al. \(2023\)](#), the study examines how self-sacrificial leadership moderates the negative effects of HPWS. Data collected from a Chinese firm demonstrate that HPWS heightens emotional exhaustion and turnover intention, but these effects are reduced under strong self-sacrificial leadership. The findings highlight the role of supportive leadership in defending HPWS pressures and nourishing performance.

The study ([Kundi et al., 2023](#)) observes how discretionary HRM practices influence employee attitudes and behaviors. Utilizing three-wave data, the results show that "career satisfaction and organizational identification" mediate, whereas work engagement moderates the HRM-outcomes link. Flexible HRM practices significantly impact knowledge sharing and turnover intentions. The findings guide managers in tailoring context-specific best practices.

The study ([Badru et al., 2024](#)) observes how HPWS, stewardship climate, and trust in supervisor shape employee voice behavior from the telecom sector in Nigeria. Gathered data from 376 employees and analyzed through PLS-SEM, outcomes show that HPWS positively influences voice, whereas stewardship climate has a negative effect. Trust in a supervisor mediates and strengthens relationships.

According to [Nasurudin et al. \(2018\)](#), turnover among nurses threatens healthcare efficiency and effectiveness, making retention a key priority. This study examines how organizational commitment mediates the link between HPWPs and intention to leave among 639 nurses in Malaysia. Results show that performance appraisal and compensation reduce turnover intention through commitment, while employment security has no effect.

In the study, [Bakhtiar et al. \(2024\)](#) examined how HPWS overcomes the turnover intention in "Kuala Lumpur" in the tourism industry, focusing on the mediating roles of organizational justice and job embeddedness. Survey data gathered from 112 restaurant employees exposed performance management, employee relations, and appraisal intention to leave. The results highlight the importance of fostering HPWS practices supported by justice and embeddedness to retain talent. Practical implications stress adopting policies that strengthen employee retention in the tourism sector.

According to [Rubel et al. \(2021\)](#), the study observes how HPWPs influence medical professionals' outcomes by perceived organizational support in Bangladesh's private hospitals. Using survey data from 218 doctors and PLS-SEM analysis, results show HPWPs improve performance, enhance organizational support,

and reduce turnover intention. Organizational support significantly mediates the link between HPWPs and both turnover and performance. The study provides insights that strengthen healthcare management in the context of developing countries.

According to [Wang et al. \(2024\)](#), the study inspected how HPWS increases innovation performance in Chinese SMEs. Data collected by 309 respondents, results show HPWS improves innovation through intrinsic motivation, with “person-organization fit” playing a key moderating role. Results highlight that HPWS raises employee innovation by aligning organizational practices with individual fit and motivation. The study contributes to HPWS and offers a theoretical basis for strengthening organizational competitiveness through innovation.

The study of [Berber and Gašić \(2024\)](#) examined how employee commitment mediates the association between compensation systems and intention to leave. Data collected by a survey from 764 employees in Serbia and PLS-SEM analysis were made, outcomes showed that compensation positively influences commitment and negatively affects turnover intentions, with commitment partially mediating. Conducted in Serbia’s unique cultural context, the study highlights the need for modern recompense mechanisms to support commitment and reduce turnover. It concentrates solely on compensation practices instead of HR processes.

The study of [Xi et al. \(2021\)](#) inspected how employees’ perceptions mediate between HPWS and outcomes in Chinese firms. Data collected from 286 companies, results demonstrate that HPWS shapes perceptions that drive affective commitment, reducing turnover intention. The study contributes to HR system strength theory and offers everyday implications for organizational performance.

According to [Kaushik and Mukherjee \(2022\)](#) study conducted a systematic literature review on HPWS, highlighting current developments and gaps. The study identifies traditional features of HPWS and introduces two new ones: agility and technology adoption. Results show HPWS can yield both positive outcomes, such as human capital development, and negative effects when HR practices are misaligned. The study contributes by consolidating existing knowledge and suggesting directions for the future.

These different and interrelated HR practices under HPWS were taken in different research studies to observe and check the impact on employees’ selection, development, retention, and specifically motivation. In the following section literature review is done for the development of hypotheses.

2.1 | HPWS and Employee Outcomes

In the literature, a positive relationship has been reported between HR practices under HPWS and employee outcomes like trust, job satisfaction, trust, motivation, OCB, organization’s commitment, and other behavioral and attitudinal variables.

In the literature of behavior, organizational commitment and Job satisfaction have been extensively researched and found for a long time. [Wu et al. \(2011\)](#) reported that an increase in intrinsic motivation among employees has been found due to the adoption of HR practices under HPWS. Another important outcome is job satisfaction, which is defined as “how people feel about their jobs and different aspects of their jobs” ([Spector, 1997](#)). [Freund \(2005\)](#) also reports the same aspect. The job satisfaction and organizational commitment come in the employees, when HR practices under HPWS are acknowledged and helpful to employees (that is, they are empowered in decision-making, get learning opportunities, and incentives & rewards). [Shore and Tetrick \(1991\)](#) reported a positive attitude and behavior of employees (commitment to

organization) under perceived organizational support (commitment from employer), HR practice of HPWS, as employees respond to their perceptions of the actions of the organization accordingly.

[Snape and Redman \(2010\)](#) and [Haar and White \(2013\)](#) investigated how the adoption of HR practice (HPWS) can affect the outcomes of employees (OCB and employee retention) and how that further affects the performance of the organization. In the same line, [Gong et al. \(2010\)](#) conceptualized the effects of HPWS on various employee attitudes and behaviors like OCB, trust a social exchange perspective. Further, [Lam et al. \(2013\)](#) have established that the organizations' development and implementation of practices related to formalized training and retention-based compensation have a positive influence on OCB of employees.

However, in [Lam et al. \(2013\)](#) study, only one variable is taken as a mediator of employee outcome. Similarly, according to [Sun et al. \(2007\)](#) and [Wu et al. \(2011\)](#), HR practices under HPWS in the form of challenging work, extensive training, and greater empowerment send signals to organizations for their employees that the experiences, knowledge, abilities, and skills of employees are very important for the organization. That is the reason organizations invest in their employees in their welfare. As a result, trust building among employees evolved with employers and with their organization.

[Wu et al. \(2011\)](#) have found HR practices under HPWS play a significant role in enhancing intrinsic motivation amongst employees, as these practices meet their prerequisite of autonomy, relatedness, and competence. The study has also initiated evidence of the positive link between participative decision-making activities and required employees' attitudes. In all the above studies, a significant and positive relation has been found between HPWS and trust & job satisfaction as employee outcomes. Based on the above discussion of literature, the hypotheses are:

H1,2 (a, b,& c): *The employees enriched with Empowerment, Employee Relation, and Extensive Training under HPWS are positively related to employees' outcomes of Job Satisfaction and Trust.*

H3 (a, b): *The employees enriched with HPWS are positively related to the employee's outcome of job satisfaction and Trust.*

2.2 | HPWS and Turnover Intention

According to [Fugate et al. \(2012\)](#), "employees' intention to leave" is a very inflated situation, especially when it is categorized by cognitive removal. [Kehoe and Wright \(2013\)](#) in their study have found that the effective use of HPWS significantly helps in reducing turnover. [Ang et al. \(2013\)](#) and [García-Chas et al. \(2014\)](#) have found that HPWS are negatively related to turnover intentions in Spain. Similarly, Kundu and Gahlawat (2016) also reported a negative association between turnover intentions of employees and HPWS.

In the study, [Hui et al. \(2007\)](#) also explored that employees feel more satisfied and committed to their organization when they express a consistent intention to remain in the organization. According to the study, [Voigt and Hirst \(2015\)](#) showed that the decrease in turnover intention of employees could be possible if high-performing employees were rewarded in the form of promotion to the next grade and to a higher position, accordingly with a combination of commitment. Based on the above discussion of literature, the hypotheses are;

H4 (a, b, &c): *The employees enriched with Empowerment, Employee Relations, and Extensive Training under HPWS are negatively related to employee turnover intention.*

H5: *The employees enriched with HPWS are negatively related to employee turnover intention.*

2.3 | Employee Outcomes and Turnover Intention

With the changing working environment and growing different business industries, organizations are facing the problem of turnover. Now it becomes the challenge for organizations to determine how they can reduce the turnover rate. This issue was highlighted in different research studies like [McBey and Karakowsky \(2001\)](#), [Hellman \(1997\)](#), [Shore and Martin \(1989\)](#), [Price and Mueller \(1981\)](#), [Ghiselli et al. \(2000\)](#), [Mobley et al. \(1979\)](#). In all these studies. Job satisfaction was observed as an antecedent of intention to leave. In past studies, negative relations have been observed between job satisfaction, trust (as employee outcomes), and turnover intention ([Kundu & Gahlawat, 2016](#); [Wu et al., 2011](#)). Therefore, hypotheses are;

H6 (a & b): *Job satisfaction and Trust as employee outcomes are negatively related to Turnover Intention of employees.*

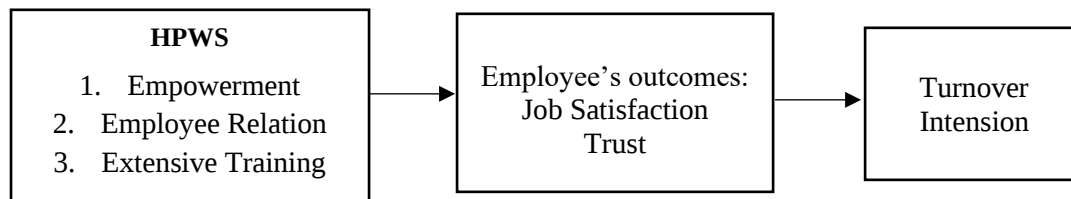
2.4 | Mediating Role of Employee Outcomes Between HPWS and Turnover Intention

The purpose of a mediator is to elucidate the relation between a criterion and a predictor. Mediators should clarify why such an outcome might occur ([Baron & Kenny, 1986](#)). In contrast to the direct relationship of HPWS with employee outcomes and turnover intention with employee outcomes, some empirical studies suggest that HPWS can affect indirectly in organizations ([Kehoe & Wright, 2013](#)). Taking into account the researcher's work, the mediating effect is very important to investigate HPWS with turnover intention.

In the study of [Freund \(2005\)](#), the two mediators as employee outcome (commitment of employee and job satisfaction) were used, that have mediated the effects of HPWS on intention to leave. When the level of job satisfaction is low, the employee of the organization will develop a behavioral intention to leave the organization. It is also expected that in this study, the relationship between HPWS and Turnover Intention would be mediated by employee outcomes of Job satisfaction and trust (as an employee outcome). Some research recommended remuneration strategies and job enrichment strategies under HR practices as antecedents of job satisfaction ([Bloom et al., 1999](#); [Hackman & Oldham, 1974](#); [Salancik & Pfeffer, 1978](#)). The mediating effect of job satisfaction between TI and HR practices has also been observed ([Ding & Wu, 2023](#); [Gautam et al., 2025](#)). In this study, the same concept is used in banking sector firms of Pakistan, i.e., the research question is to observe whether HPWS is concerned with intention to leave mediated by job satisfaction and trust (as an employee outcome).

H7 (a, b, & c): *Employee outcomes of Job Satisfaction and Trust mediate the role of Empowerment, Employee Relations, and Extensive Training under HPWS and Turnover Intention.*

H8: *Employee outcomes of job satisfaction and trust mediate the role of HPWS and Turnover Intention.*

Figure 1*Theoretical Model*

3 | METHODOLOGY & DESIGN

In this study, the role of HPWS in intention to leave through the mediating effect of employee outcome: A case of the banking sector is investigated. The data is collected once from the employees of the big five banks based in through structured questionnaires. Data for this study were collected from employees, so the population for the study is the employees of banks working in Pakistan. Here, in this study, 20 branches of 5 big banks of Rawalpindi and Islamabad are selected for collecting the data. Purposive sampling is used to collect data for analysis. The questionnaires were distributed to 370 respondents; however, only 338 responses were received, where 28 responses were incomplete, as a result final sample was reduced to 310 responses. The overall response rate of the final selection was observed to be 91.72%.

According to the recommended guideline for having at least five respondents per indicator, a minimum sample size of $28 \times 5 = 140$ was required, based on the 28 indicators used in this study ([Hair Jnr et al., 2010](#); [Kline, 2023](#)).

Three variables were used in this study, i.e., Role of HPWS (HR practices) as an independent variable, employee outcomes (Trust and job satisfaction) as a mediating variable, and turnover intention of employees as a dependent variable. The data for these variables are collected through responses to a 5-point Likert scale collected through questionnaires. [Dillman \(1978\)](#) recommended short questionnaires for surveys to get a better response. Some well-known HPWPs are selected ([Appelbaum, 2000](#); [Way, 2002](#)). Here, in this study, HPWS is measured by using three different HR practices like employee relations, empowerment, and extensive training, with overall 14 items. All these items are related to HR practices. The scale for these variables' items ranges from (1) "strongly disagree" to (5) "strongly agree".

Empowerment is measured with four items ([Bae & Lawler, 2000](#); [Boselie & van der Heijden, 2024](#)). Extensive training is measured with five items ([Agarwala, 2003](#); [Boselie & van der Heijden, 2024](#)). Employee relations is measured with five items ([Agarwala, 2003](#); [García-Morales et al., 2011](#)).

Job satisfaction is measured with three items [Price and Mueller \(1981\)](#). Trust is measured as [Robinson \(1996\)](#). All these items were measured on a five-point Likert scale ranging from strongly disagree (one) to strongly agree (five). Turnover intentions are measured with five items ([Hom & Griffeth, 1991](#)). To investigate the role of HPWS on turnover intentions of employees, the study also includes age, gender, and length of service as control variables. Further, common method bias was also not an issue in this study as factors were less than the threshold of 50% of total variance.

4 | RESULTS AND ANALYSIS

AMOS, SPSS, and Excel were used for analysis.

4.1 | Descriptive Statistics of Demographics

Demographic analysis includes frequency, average, percentage, and standard deviation of all the respondents of this study. The demographic variables were gender, marital status, age group, work status, position, and job experience of the respondent.

In this research study, 74.5 percent were males and 25.5 percent were females, participants from a total sample of 310. Ageing of the participants was from 18 to more than 60 years old, where 24.84 percent were in the age group 18-25 years, 42.58 percent were in the age group of 26-40 years, 30.32 percent were in the age group of 41-60 years, and the remaining 2.26 percent were in the age group of over 60 years. Additionally, the majority of the participants were in responsible positions, i.e., top management were 20.65 percent, middle management were 40.65 percent, and the remaining (38.71 percent) were at lower /clerical positions. In job-related experience, 40.32 percent of participants have experience up to five years, 25.48 percent, participants have experience six to 10 years, 22.58 percent have experience eleven to twenty years, 10.97 percent, participants have experience twenty-one to thirty years, and 0.65 percent, participants have experience more than thirty years.

The descriptive statistics, normality, and reliability of all constructs and indicators are displayed in table 1. For, normality of data (skewness & Kurtosis) and for the reliability of data (Cronbach's alpha) are used.

Table 1

Descriptive, Normality, and Reliability

Constructs	Indicators	Skewness	Kurtosis	Avg	SD	Cronbach's alpha
Extensive Training	ET1	-0.841	-0.303	4.497	0.622	0.900
	ET2	-0.565	-0.595	4.419	0.617	
	ET3	-0.478	-0.644	4.406	0.604	
	ET4	-0.588	-0.577	4.445	0.604	
Employee Relation	ER1	-0.095	-0.909	4.071	0.693	0.900
	ER2	-0.106	-0.890	4.081	0.690	
	ER3	-0.093	-0.836	4.074	0.681	
	ER4	-0.104	-0.862	4.081	0.685	
Empowerment	EMP1	-0.366	-0.680	4.310	0.634	0.963
	EMP2	-0.264	-0.640	4.261	0.628	
	EMP3	-0.254	-0.656	4.242	0.636	
	EMP4	-0.233	-0.626	4.239	0.629	
Job Satisfaction	JS1	-0.038	-0.374	4.061	0.618	0.923
	JS2	-0.064	-0.630	4.065	0.650	
	JS3	-0.037	-0.853	4.029	0.684	
Trust	TRUST1	-0.094	-0.596	4.100	0.643	0.923
	TRUST2	-0.083	-0.693	4.077	0.659	

Turnover Intention	TRUST3	-0.036	-0.544	4.042	0.640	0.948
	TURN1	-0.024	-0.284	1.774	0.558	
	TURN2	-0.073	-0.077	1.813	0.549	
	TURN3	-0.065	-0.103	1.810	0.551	
	TURN4	0.000	-0.279	1.784	0.565	
	TURN5	0.002	-0.310	1.774	0.564	

As the values of skewness and kurtosis fall in the recommended range, the data is said to be normal. The results also demonstrated consistency among the items. For reliability of the data, Cronbach's alpha values were found to be greater than or equal to 0.900, showing good reliability.

4.2 | Measurement Model

Confirmatory Factor Analysis, CFA, is a good technique to validate the instrument and "goodness of fit" of the model. The Construct Validity measure is used to validate the instrument. Convergent validity, Nomological validity, and Discriminant validity are the main components of construct validity. Indices of "Goodness of fit" are used to check the goodness of fit of the measurement model of this study.

Table 2

Results Summary of Measurement Model.

LATENT VARIABLE	INDICATOR'S	LOADINGS	INDICATOR RELIABILITY	COMPOSITE RELIABILITY (C.R)	AVE
Extensive Training	ET_1	0.873	0.762	0.9	0.692
	ET_2	0.822	0.676		
	ET_3	0.814	0.663		
	ET_4	0.816	0.666		
Employee Relation	ER_1	0.897	0.805	0.92	0.741
	ER_2	0.855	0.731		
	ER_3	0.833	0.694		
	ER_4	0.858	0.736		
Empowerment	EMP_1	0.909	0.826	0.964	0.871
	EMP_2	0.983	0.966		
	EMP_3	0.93	0.865		
	EMP_4	0.909	0.826		
Job Satisfaction	JS_1	0.883	0.78	0.924	0.802
	JS_2	0.923	0.852		
	JS_3	0.88	0.774		
Trust	TRUST_1	0.825	0.681	0.903	0.756
	TRUST_2	0.906	0.821		
	TRUST_3	0.876	0.767		

	TURN_1	0.883	0.78		
	TURN_2	0.891	0.794	0.948	0.786
Turnover Intentions	TURN_3	0.92	0.846		
	TURN_4	0.9	0.81		
	TURN_5	0.838	0.702		

Different fit statistics are displayed in table 2. Initially, there were 28 items; however, those items were excluded from the final analysis whose factor loadings (lambda's) were below the acceptance level (i.e., less than or equal to 0.6). As a result, five items were deleted. These items /questions were Employee Relations: "Organization offers faster promotions (internal) to the employees"

Extensive Training "Organization provides the facility of learning using multiple electronic technologies for the explicit purpose of training employees." Trust "My employer is open and upfront with me". "I think my employer treats me fairly." "I can expect my employer to treat me in a consistent and predictable fashion."

The remaining 23 items' factor loadings were again obtained by CFA and observed to be greater than 0.6 and were significant at 1 percent, as shown in the third column of table 2. All twenty-three items were significantly associated with their respective six constructs.

Indicator Reliability is calculated by taking the square of factor loadings. For this measure of reliability, the value should be greater than 0.5. The results of Indicator reliability are displayed in the fourth column of table 2, showing the acceptance level for all the items.

Further, the analysis of Composite Reliability (CR), also called McDonald's coefficient, is also discussed in column 5 of table 2. For the acceptance level, this measure should be greater than 0.7. The Convergent Validity was measured by average variance extracted (AVE) & factor loadings. The convergent validity and AVE were calculated in Excel. According to [Kline \(2023\)](#), for the acceptance level, all factor loadings should be greater than 0.6, and values of AVE should be greater than 0.5. Here, the results are in accordance with [Kline \(2013\)](#).

The results of discriminant validity are displayed in table 3. Discriminant validity identifies the degree to which one construct is different from another construct. The acceptance level for this reliability is that the square root of average variance extracted must be greater than all the correlations within constructs. The results of discriminant validity are validated as the square root of AVE for all constructs was found to be greater than the correlation between the constructs.

Table 3

Descriptive Statistics, Correlation, and Fornell-Larcker Test for Discriminant Validity.

Variables	Mean	SD	1	2	3	4	5	6
1. TURNO	1.79	0.51	0.832					
2. TRUST	4.07	0.59	-0.647	0.861				
3. JS	4.05	0.61	-0.610	0.569	0.933			
4. EMP	4.26	0.60	-0.612	0.581	0.571	0.896		
5. ER	4.08	0.62	-0.559	0.538	0.490	0.567	0.869	
6. ET	4.44	0.54	-0.607	0.469	0.492	0.576	0.482	0.887

***Note:** TURNO = Turnover Intentions, JS = Job Satisfaction, EMP = Empowerment, ER = Employee Relations and ET = Extensive Training. Means (s) and SD(s) are displayed in columns 2 and 3.

The results of Nomological validity are confirmed through the correlation matrix displayed in table 3. The sign of the correlation coefficient between different variables is accordingly as suggested in the theory of this research study, which confirms the Nomological validity. The measurement model reported reasonably good-fit and best-fit under different fit indices within data & specified model ranges, where χ^2 of 345.049 with 215 degrees of freedom ($p \leq 0.05$); [$\chi^2/d.f = 1.605$], [TLI = 0.978], [CFI = 0.981], [GFI = 0.911], [AGFI = 0.886], [RMSEA = 0.044], and [SRMR = 0.028]. As discussed earlier, to increase the validity, reliability, and decrease measurement errors, five out of twenty-eight items were deleted.

4.3 | The Structural Model

The results of goodness of fit for two models, model 1 with control variables, and model-2 without control variables, have shown goodness of fit. The overall fit of the initial structural model 1 reported reasonably good-fit and best-fit under different fit indices within specified model ranges, where χ^2 of 556.349 with 286 degrees of freedom; [$\chi^2/d.f = 1.945$], [TLI = 0.956], [CFI = 0.961], [GFI = 0.883], [AGFI = 0.856], [RMSEA = 0.055], and [SRMR = 0.059].

In the same way, the overall fit of structural model 2 also reported reasonably good-fit and best-fit under different fit indices within specified model ranges, where χ^2 of 389.125 with 217 degrees of freedom; [$\chi^2/d.f = 1.793$], [TLI = 0.971], [CFI = 0.975], [GFI = 0.901], [AGFI = 0.874], [RMSEA = 0.051], and [SRMR = 0.054]. From the structural model, six variables were examined: Empowerment, Employee Relations, Extensive Training, Job Satisfaction, Trust, and Turnover Intentions.

4.4 | Direct Effects

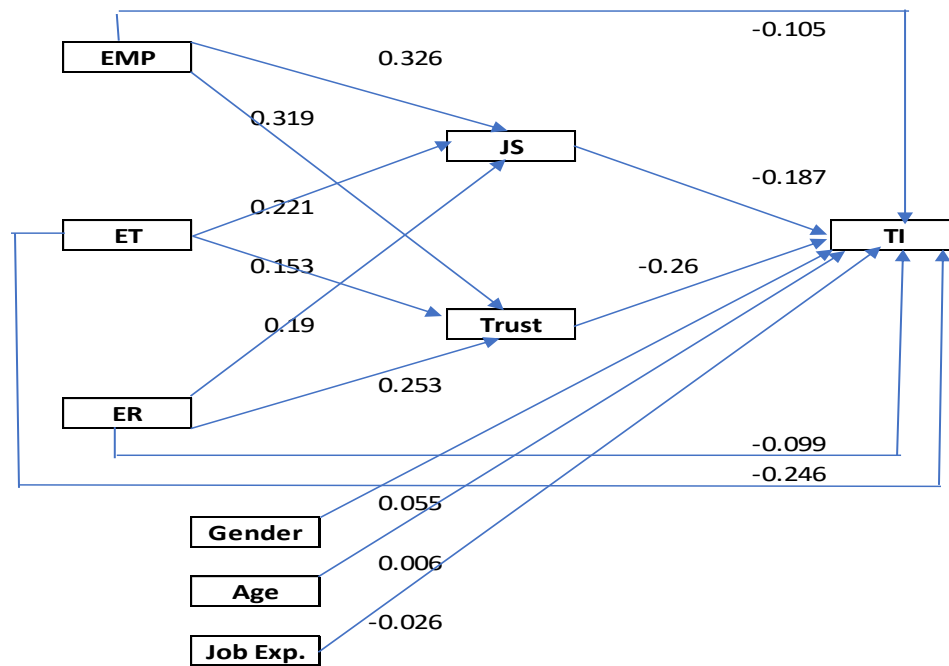
The direct effect of HPWS practices separately (first-order structural model), along with, as a bundle (second-order structural model), on job satisfaction and trust was analyzed through a structural model. From the results of the structural model, table 4 envisaged that HPWS practices, empowerment, employee relationship, and extensive training have positive and significant direct effects on job satisfaction EMP [$\beta = 0.326$, $p < 0.001$], ER [$\beta = 0.19$, $p < 0.01$] & ET [$\beta = 0.221$, $p < 0.01$] respectively. Therefore, hypothesis-1a, hypothesis-1b, and hypothesis-1c were supported.

Similarly, these HPWS practices: empowerment, employee relationship, and extensive training have positive and significant direct effects on trust EMP [$\beta = 0.319$, $p < 0.001$], ER [$\beta = 0.253$, $p < 0.001$] & ET [β

= 0.153, $p < 0.05$] respectively. Therefore, hypothesis-2a, hypothesis-2b, and hypothesis-2c were also supported.

Figure 1

Direct Effects of Structure Model-1



In the same line, when the direct effect of HPWS practices as a bundle on job satisfaction and trust was analyzed through a structural model, a positive and significant direct effect on job satisfaction and trust was observed with $\beta = 1.136$ and $\beta = 1.19$, respectively, with p 's < 0.001. Therefore, hypothesis-3a and hypothesis-3b were supported.

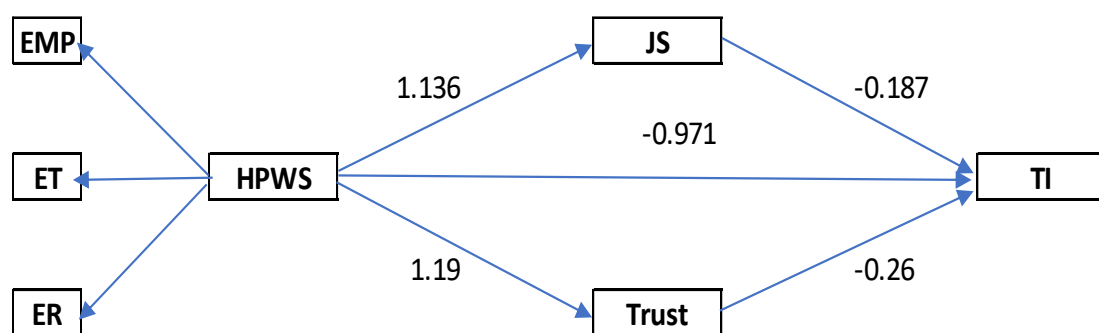
Further, the direct effect of HPWS practices separately, along with, as a bundle on turnover intentions was analyzed and reported in table 3. From the results of the structural model, HPWS practices: empowerment, employee relationship, and extensive training have a negative and significant direct effect on turnover intentions; EMP [$\beta = -0.105$, $p < 0.05$], ER [$\beta = -0.099$, $p < 0.05$] & ET [$\beta = -0.246$, $p < 0.001$] respectively. Therefore, hypothesis-4a, hypothesis-4b, and hypothesis-4c were supported.

Table 4*Direct Effect of IVs, Mediating, and DVs*

Variable 1	Relation	Variable 2	Betas	S.E.	t	P
JS	<---	ER	0.19	0.059	3.203	0.001
TRUST	<---	ER	0.253	0.059	4.307	***
JS	<---	ET	0.221	0.073	3.031	0.002
TRUST	<---	EMP	0.319	0.064	4.992	***
TRUST	<---	ET	0.153	0.071	2.153	0.031
JS	<---	EMP	0.326	0.065	5.054	***
TI	<---	JS	-0.187	0.051	-3.679	***
TI	<---	ER	-0.099	0.047	-2.11	0.035
TI	<---	TRUST	-0.26	0.055	-4.75	***
TI	<---	ET	-0.246	0.057	-4.334	***
TI	<---	EMP	-0.105	0.052	-2.031	0.042
HPWS	<---	JS	1.136	0.123	9.252	***
HPWS	<---	TRUST	1.19	0.131	9.119	***
HPWS	<---	TI	-0.971	0.18	-5.396	***

Note:* * $p < .05$; ** $p < .01$; * $p < 0.001$

In the same line, when the direct effect of HPWS practices as a bundle on turnover intentions was analyzed through a structural model, a negative and significant direct effect was observed with $\beta = -0.971$ with $p < 0.001$. Therefore, hypothesis 5 was supported.

Figure 2*Direct Effects of Structure Model-2*

Further, the job satisfaction and trust have a negative and significant effect on turnover intentions with $\beta = -0.187$, $p < 0.001$, and $[\beta = -0.26, p < 0.001]$. Therefore, hypothesis-6a and hypothesis-6b were also supported.

4.5 | Mediation Effects

The mediating effect of HPWS on turnover intentions through job satisfaction and trust was analyzed. The three different practices, empowerment, employee relations, and extensive training under HPWS were

taken separately along as a bundle. The indirect effect of empowerment, employee relations, and extensive training on turnover intentions through job satisfaction was negative and significant [$\beta = -0.222$, $p < 0.05$, $\beta = -0.216$, $p < 0.05$, and $\beta = -0.201$, $P < 0.05$], respectively. In the same way, the indirect effect of empowerment, employee relations, and extensive training on turnover intentions through trust was also negative and significant [$\beta = -0.255$, $p < 0.05$, $\beta = -0.265$, $p < 0.05$, and $\beta = -0.216$, $P < 0.05$] respectively. However, the indirect effect of HPWS as a bundle, on turnover intentions through job satisfaction and trust, was negative but insignificant.

Figure 3

Mediation Effects: First Order Structural Model

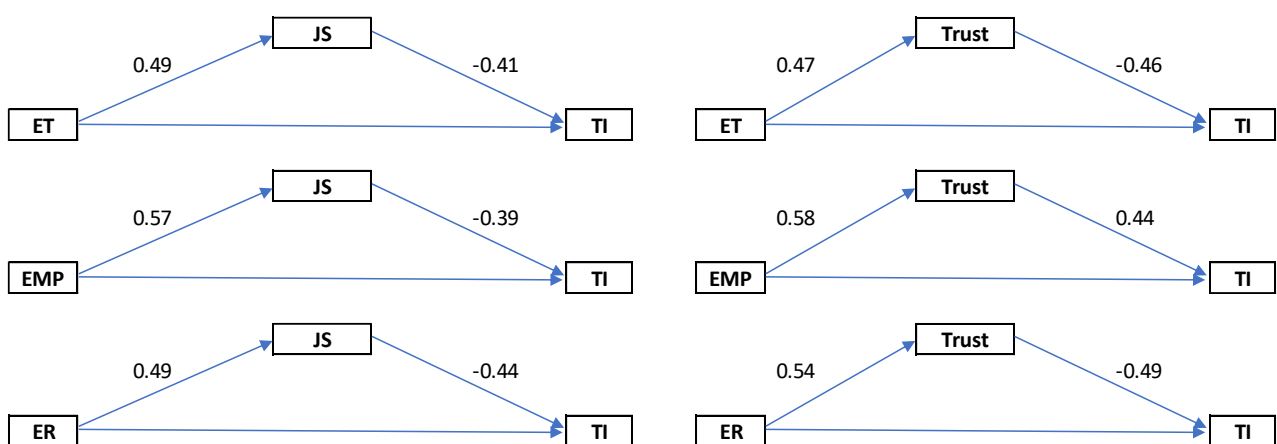


Figure 4

Mediation Effects: Second-Order Structural Model

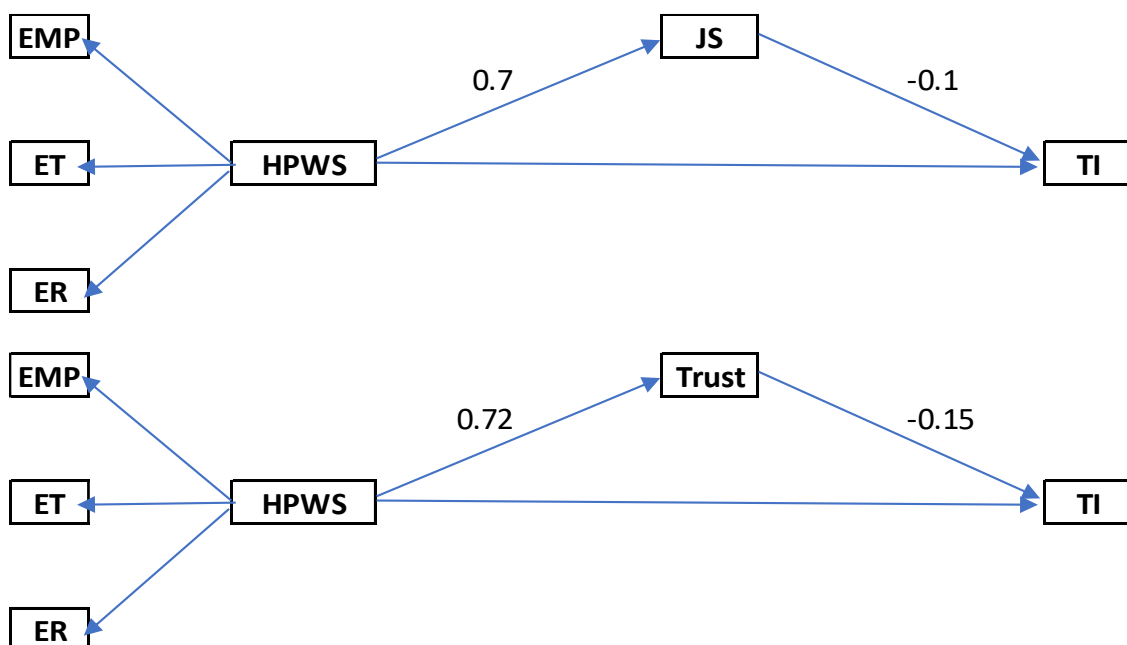


Table 5*Mediation Effects*

Cases	Exogenous Variable (X)	Mediator (M)	Endogenous Variable (Y)	Path Coefficient X → M, a	Path Coefficient M → Y, b	Indirect Effect (a×b)	Bootstrap 95% C. I.	
							Lower	Upper
1	ER	JS	TI	0.490	-0.440	-0.216*	-0.301	-0.155
2	ET	JS	TI	0.490	-0.410	-0.201*	-0.281	-0.149
3	EMP	JS	TI	0.570	-0.390	-0.222*	-0.310	-0.154
4	ER	Trust	TI	0.540	-0.490	-0.265*	-0.352	-0.187
5	ET	Trust	TI	0.470	-0.460	-0.216*	-0.285	-0.157
6	EMP	Trust	TI	0.580	-0.440	-0.255*	-0.336	-0.183
7	HPWS	JS	TI	0.700	-0.100	-0.070	-0.176	0.077
8	HPWS	Trust	TI	0.720	-0.150	-0.108	-0.216	0.002

Note:* Control variables were gender, age, and job experience. * $p < .05$; ** $p < .01$; * $p < 0.001$

In a first-order structural model, to determine if there is a partial, full, or no mediation effect of job satisfaction and trust between HPWS practices, empowerment, extensive training, and employee relations on turnover intentions, it is essential to analyze the direct effect of HPWS practices, empowerment, extensive training, and employee relations on turnover intentions. As the SEM analysis envisaged that the direct effect of these practices is significant. Therefore, partial mediating effects are observed. It means that job satisfaction and trust partially mediate the relationship between HPWS practices, empowerment, extensive training, and employee relations on turnover intentions. Therefore, hypotheses H7a, H7b, and H7c were also supported.

In a second-order structural model, to determine if there is a partial, full, or no mediation effect of job satisfaction and trust between HPWS on turnover intentions, it is essential to analyze the direct effect of HPWS on turnover intentions. As the SEM analysis envisaged that the direct effect of HPWS was significant, but the indirect effect of HPWS (as a bundle), on turnover intentions through job satisfaction and trust, was negative but insignificant. Therefore, no mediating effect is observed. It means that job satisfaction and trust did not mediate the relationship between HPWS on turnover intentions. Therefore, hypothesis H8 was not supported.

4.6 | Direct Effects of Demographics

The results from the SEM analyses, table 6, envisage that control variables, gender, age, and job experience have no impact on turnover intentions, as insignificant results are observed. These control variables do not play any role in determining the impact of HPWS (practices) on turnover intentions.

Table 6*Direct Effect of Control Variables*

Variable 1	Relation	Variable 2	Betas	S.E.	t	P
TI	<---	Gender	0.055	0.044	1.243	0.214
TI	<---	Age	0.006	0.029	0.208	0.835
TI	<---	Job Tenure	-0.026	0.022	-1.176	0.24

*Note: * $p < .05$; ** $p < .01$; *** $p < 0.001$

4.7 | Hypothesis Testing

All the direct hypotheses are accepted, while the results of the indirect effects of the hypothesis show that job satisfaction and trust partially mediate between individual HPWS practice and turnover intentions. On the other hand, in the second-order structural model, job satisfaction and trust did not mediate between HPWS (as a bundle) and turnover intentions.

5 | DISCUSSION

In this research study, the impact of the role of HPWS through three important practices: empowerment, extensive training, employee relations, and employee outcomes; job satisfaction & trust, and turnover intentions among the employees of five big banks was analyzed. In addition to analyzing the impact of these practices separately, in the second order of the structural model, these practices were taken as a bundle, on turnover intention through employees' outcome of job satisfaction and trust.

This is the first study in Pakistan by selects the banking sector to observe the role of HPWS in turnover intention through the mediating effect of employee outcome. Unlike previous research, the impact of each HPWS practice was examined and is more relevant for considering each practice's impact on turnover intention. Results of this research provided support for all the hypotheses except one hypothesis; employee outcomes of job satisfaction and trust mediate the role of HPWS (as a bundle) and turnover intentions. Overall, the results of this study envisaged that each HPWS practice has a positive direct effect on trust and job satisfaction, while a negative direct effect on turnover intention. In the same line, the results of the second-order structural model envisaged that HPWS has a positive direct effect on trust and job satisfaction, while a negative direct effect on turnover intention.

On the other hand, in the first order of the structural model, amongst the indirect effects of each practice of HPWS on turnover intentions, the strongest effect was observed through job satisfaction and trust. As a result, job satisfaction and trust partially mediated the relationship between HPWS practices, empowerment, extensive training, and employee relations on turnover intentions. However, in the second order of the structural model, amongst the indirect effects of HPWS on turnover intentions, the strongest effect was not observed through job satisfaction and trust. As a result, job satisfaction and trust did not mediate the relationship between HPWS on turnover intentions.

This research study provided empirical support for human capital theory, social exchange theory ([Blau, 1964](#)), and transaction cost theory. As human capital theory suggests that competitive advantages come from the resources that firms contain internally, i.e., the employees of the firms. In the same way, social exchange

theory is validated here in this research, as investments in employees in the form of extensive training, employee relations, and empowerment (i.e., HR practices under HPWS), inspire employees to respond by showing positive behavior like trust and job satisfaction. On the other hand, transaction cost theory suggests that the cost related to hiring of new employee (one of the aspects of transaction cost theory) against the experienced employee leaving the organization. So, this cost will be reduced when there is less or no turnover intention. As a result, organization can retain their skilled and experienced employees of the organization by adopting HPWS. The findings of this research study extended the existing literature on HPWS and turnover intentions in the banking sector in Pakistan.

The findings of this research study envisaged that, like in other countries, the awareness in Pakistani firms has arisen to adopt HPWS as this will lead to various outcomes of employees, such as job satisfaction and trust a resulting in lower or no turnover intentions. That is when job satisfaction and trust increase, which decreases the turnover intentions of employees from the firms. So, one possible clarification from the results of this study envisaged that employees acquainted with positive behaviors (trust and job satisfaction due to HPWS) support them in fostering a stronger bond with the organization a resulting in lesser or no turnover intentions from the organization.

In the first order of the structural model, the results revealed that the HPWS practices, when taken separately as well as a bundle (in the second order structural model) positive impact on employee outcomes and a negative impact on turnover intentions was observed. The results of the second-order structural model validated the universal approach adaptability of HPWS in Pakistani banking sector firms.

As different mediators were used as linking mechanisms in the previous study between HPWS turnover intention, this study has extended the present literature by taking two important mediators, job satisfaction and trust, in first-order and second-order structural models in the banking sector of Pakistan. The mediation of these variables (job satisfaction and trust) was found to be significant in the first-order structural model and was insignificant in the second-order structural model. The mediation results of the first order were in accordance with the prior studies, like [Ang et al. \(2013\)](#). When these mediators are taken alone between each practice (empowerment, extensive training, and employee relations), a significant decline in turnover intentions is shown.

6 | CONCLUSION

This research study elaborated the role of HPWS in turnover intention through the mediating effect of employee outcomes in the banking sector of Pakistan. Data was collected from the employees from five big banks of Rawalpindi and Islamabad working in different positions (managers, officers, and staff / clerical). Before regression analysis by using SEM in AMOS, reliability analysis was checked through Cronbach's alpha, and CFA analysis was validated. The different fit statistics for goodness of fit were also used to validate the instrument. The different fit statistics for goodness of fit for the measurement model, as well as for the structural model, were found to be in the acceptable range, i.e., reasonably good-fit and best-fit under different fit indices χ^2 , TLI, CFI, GFI, AGFI, RMSEA, and SRMR.

In the Correlation analysis, no multicollinearity issues were observed. Further, the sign of the correlation coefficients between different variables was as suggested in the theory of this research study. All the

hypotheses of this study were accepted except the last one by using first and second-order structure models. Based on the findings of this research study, overall, this study envisaged that each HPWS has a positive direct effect on trust and job satisfaction, while a negative direct effect on turnover intentions. On the other hand, in the first order of the structural model, amongst the indirect effects of each practice of HPWS on turnover intentions, the strongest effect was observed through job satisfaction and trust. As a result, job satisfaction and trust partially mediated the relationship between HPWS practices, empowerment, extensive training, and employee relations on turnover intentions. However, in the second order of the structural model, amongst the indirect effects of HPWS on turnover intentions, the strongest effect was not observed through job satisfaction and trust. As a result, job satisfaction and trust did not mediate the relationship between HPWS on turnover intentions.

5.1 | Managerial Implications

From the results of this study, many managerial applications are possible. First implication, in the sense that the firms that are not using HPWS can get the lesson on how they can reduce the transaction cost of employees' turnover intention, as it is a big cost when skilled and experienced employees leave the organization. In addition, managers should adopt HR practices under HPWST so that they can reduce the turnover intentions of employees from the organization. Second, adopting HPWS by firms can lead to improvement in psychological and behavioral aspects (job satisfaction and trust) as a positive and significant direct effect was observed between HPWS and job satisfaction & trust. As a result, the working environment of the organization will also be improved. Third, from the findings of this study, job satisfaction and trust partially mediated the relationship between HPWS practices, empowerment, extensive training, and employee relations on turnover intentions. Therefore, only the implementation of these HR practices under HPWS will not limit the turnover intentions of employees; therefore, the organization should enhance the employee outcomes (job satisfaction, trust). Fourth, the firms that are not using HR practices under HPWS are recommended to use these practices to lower the turnover intentions rate.

5.2 | Limitations and Future Direction

This research study has many limitations that will limit the generalizability of its results. The study used the banking sector only, so other sectors should be included in future research. In this research, the data were collected from the big five banks of Rawalpindi and Islamabad; in future research, all other banks from different cities should be included in the sample to draw better results. In this study, only three HR practices were taken under HPWS; for future research, additional practices should be taken. Further, this research has taken only two mediators; future researchers can take additional mediators like organizational citizenship behaviors, motivations. The mediation analysis regarding parallel mediation and serial mediation is also recommended for future research.

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