

Do High-Performance Work Systems Have Financial Impact On Organizational Performance

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Abstract

The main idea of this research is to examine the financial impact of high-performance work systems (HPWS) on organizational performance of the banking sector of Pakistan. This study is conducted in two phases concerning data collection and analysis. In the first phase, cross-sectional data were collected from the staff of the banking sector through a questionnaire. In the second phase, the financial data of the banks were collected for the same financial year in which primary data was collected. The analysis was performed using SmartPLS. Primary data on employees' perceptions about the extent of high-performance work system was collected from 392 bank employees. In addition, performance measures were obtained from the banks' annual reports. Results have shown that HPWS is significantly related to organizational performance in terms of return on equity, return on assets, and earnings per share.

Keywords: High-performance Work System; Organizational Performance; Return on Assets, Return on Equity; Earning per Share.

I. INTRODUCTION

It has always been a vital concern for managers that their organizations should run in an efficient and effective way. There are three common elements to achieve any of these objectives: goals, material resources, and people (Neal & Tromley, 1995). Organizations use all forms of assets including financial, human, and firm attributes to enhance its efficiency and effectiveness (Xi, Chen, Zhao, & S., 2021). Among all assets, people are considered most valuable resource and key to accomplish desired firm performance (Huselid & Becker, 1997). Therefore, management of human resources has been considered as the most crucial factor for maintenance and improvement of organizational performance (Ramsay, Scholarios, & Harley, 2000).

The impact of Human Resource Management (HRM) on organizational performance has

become the main research subject in the field. Most of the research in the HRM-performance literature is arranged around various research approaches. Researchers have mostly considered systems and strategic approach on HRM as the two major perspectives in the field of HRM and performance relationship. Research in systems approach has mainly focused on the overall set of HR practices and their effects on organizational performance (Kehoe & Wright, 2013; Fareed, Isa, & Noor, 2016, Hauff, 2018). According to strategic approach HR practices must be aligned horizontally towards organizational goals and must complement each other to formulate organization's strategy (Bamberger, Biron, & Meshoulam, 2014). The rationale of strategic perspective is that HR practices essentially develop employees' abilities, knowledge and motivation in such a way to enable employees to behave in manners that are beneficial to the application of a

particular strategy (Tan & Nasuridin, 2011; Hassan, 2016). Together these two perspectives provide a base to explore how HR practices and their effect on employee characteristics can lead to desired performance at the organizational level (Mansour, Nizar, Emna, & Chiha, 2014).

The ultimate objective of almost all the activities of an organization is to maximize profits and returns. Some activities are directly related to this objective, and others indirectly. Human Resource Management is primarily associated with improving the efficiency and effectiveness of employees, but this is also linked to financial performance. Ideally, all efforts to manage and improve human resources should enhance financial returns, but in reality, this may or may not be the case. Most of the studies for examining the impact of HR practices and organizational performance have been conducted in developed countries (Boselie, 2010; Chen et al., 2021; Combs et al., 2006; Teo et al., 2011; Tran et al., 2018). Although most researchers think that HR practices positively affect organizations' performance, it is still unanswered how these HR practices affect organizational performance. It is also a matter of question whether it is an effect due to individual HR practices or a system of HR practices associated with the organizational performance (Jiang & Liu, 2015; Obeidat et al., 2016).

To draw logical inferences, one must understand the actual and real relationships between HR practices and an organization's financial performance. Although the researchers think that HR practices positively affect organizational performance, it is still a matter of investigation whether it is due to some individual HR practices or there should be a system of HR practices that have more significant effects. Besides, it is necessary to obtain the opinions of employees regarding organizational performance. Therefore, there is a need to adopt a multi-level approach to analyze the impact of high-performance work systems on financial performance by obtaining data from the employees of the organizations. Furthermore, most of the research has been carried out in manufacturing context, mostly in developed

countries, whereas the current study is focused on the banking sector of Pakistan.

II. LITERATURE REVIEW

High-performance work system (HPWS) has been introduced as an emerging concept in field of human resource management (Xi, Chen, Zhao, & S., 2021). HPWS method is comprehensive in choice as it encloses features of both high-commitment and high-involvement HR system tactic (Zacharatos, Barling, & Iverson, 2005). Emphasising the importance of HPWS, Maślanka-Wieczorek (2014) observed that HPWS may be used to achieve the desired outcomes of an organization. These outcomes may include; to develop the knowledge, talents and capabilities of employees, improve motivation and commitment, job satisfaction, reduce absenteeism, and reduce turnover. HPWS focuses on such HR practices that may create competitive advantage for the organization. It is not a set of some rigid HR practices but it includes the best HR practices that lead to enhanced organizational performance such as selective hiring, extensive training & development, incentives, promotions, performance evaluation, employee participation, sharing of information, use of working teams and the programs that focus the work life balance (Barrick, Thurgood, Smith, & Courtright, 2015). Subramony (2009) in a meta-analysis of HRM-based studies found that various studies have used a wide range of HR practices to develop a system of high-performance practices. Various authors presented different sets of HR practices that result in better performance to organization. For instance, Arthur (1994) considered six HR practices including skill development, training, empowerment, performance-based compensation, participation in decision making, and high wages as high performance HR system. Youndt, Snell, Dean Jr and Lepak (1996) investigated the impact of HR practices on organizational performance and grouped HR practices into two indexes: firstly, human capital enhancing HR system comprised of practices including selective staffing; developmental and behaviour based performance appraisal; selection for technical and problem solving

skills; group incentives; skill-based pay; external equity; and salaried compensation. Secondly, administrative system consisted of practices including selection for manual and physical skills; result based performance appraisal; policies and procedures; training; individual equity; individual incentives and hourly paid status.

The Choice of explicit naming may have some particular undertone to certain researchers. Some HR systems focus on the practices which provide empowerment to employees, and their participation in decision making while other systems may focus on employee training and development, enhancement of skills and knowledge and such other practices (Ashraf & Hussain, 2020). Most of the researchers consider the implementation of some specific HR practices in a particular environment so it may not be generalized for all types of situations (Guthrie, Flood, Liu, & MacCurtain, 2009; Maślanka-Wieczorek, 2014; Huselid & Becker, 1997).

In the current study, the high-performance work system includes the seven most significant HR practices: selection, employment security, employee involvement, internal career opportunities, training & development, reward system, and performance appraisal.

Organizational Performance Perspectives

Most of the studies investigated the two perspectives of the organizations' performance (1) Shareholder value perspective and (2) Stakeholder value perspective (Ashraf & Hussain, 2020; Boxall, 2012; Drummond & Stone, 2007; Guthrie et al., 2009; Pereira et al., 2018)

2.5.1 Shareholder value perspective

The Shareholder value perspective focuses more on profits and earnings than responsibilities and thinks that the organizations work like instruments for the owners (Afza & Nazir, 2008). The concept perceives that the success of an organization can be measured through financial indicators like profitability, dividends, and share price. The concept believes that the organization is fully satisfying and works in

society's favor when it works for the individual's interest and economic efficiency (Dastmalchian et al., 2020).

2.5.2 Stakeholder value perspective

As opposite to shareholders. the concept of the Stakeholder value perspective focuses more on responsibilities rather than profitability. It assumes organizations as an alliance that should serve all the parties involved. The concept believes that the success of organizations should be measured by satisfying all the stakeholders (Abid et al., 2015). The advocates of this concept believe that society is the responsibility of the organizations and emphasis that the organizations should serve society through economic cooperation and joint interest (Cafferkey & Dundon, 2015; Combs et al., 2006; Han et al., 2020; Okafor et al., 2021).

In the service sector, there are several financial performance indicators. However, the current study includes the most important indicators like earning per share, return on assets and return on equity.

III. THEORETICAL FRAMEWORK AND METHODOLOGY

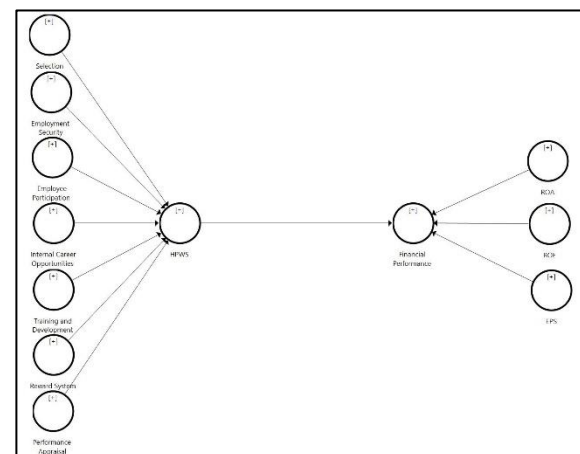


Figure 1: Theoretical Framework

Previous studies related to HRM have tried to explore the direct relationship between HR practices and organizational performance and reported a significant direct relationship between them (Arthur, 1994; Guthrie et al., 2009; Huselid & Becker, 1997; Maślanka-Wieczorek, 2014; Shih et al., 2006). However, these studies were conducted in the context of perceived

performance and could not provide the evidence in terms of financial aspects of the organizations. Resource based view (RBV) is widely used to explain the linkage between HRM and organizational performance. The RBV approach advocates that organizations should pay more attention to its resources for sources of competitive advantage. Researchers have suggested that the RBV has significantly influenced the field of HRM and considered that a system of HR practices that are rare, valuable in nature, non-substitutable and unique will become a competitive advantage for an organization (Barney J. , 1991; Kraaijenbrink, Spender, & Groen, 2010; Kaufman, 2015).

According to Barney and Mackey (2016), Resource based view has been described as a major contributing theory that establishes the relationship between HPWS and organizational performance for several reasons. First, firm's human capital is comprised of employees' knowledge, skills, and abilities. HPWS can play a vital role in strengthening the knowledge, skills and motivation of employees. It can help in bringing out the desired behaviour which is essential for the higher performance of the firm. Second, there is a continuous movement of human capital throughout the firm. Employees possessing specific knowledge, skills, and abilities are assuredly influenced through HPWS. Third, the compelling processes by which firms develop and/or regenerate is also considered an important area demonstrating the link between human resource management and resource based view.

Several researchers have raised concerns and criticized previous studies for reliance on the reports of directors or HR managers about the use of high-performance HR practices while completely ignoring the important role of actual experiences of employees with these high-performance work systems (Fan et al., 2014; Han et al., 2020; Lepak et al., 2006; Liao et al., 2009). Several other reasons, including variation in research designs, sample characteristics and size coupled with low response rate, number of HR practices examined, and performance measures used in these studies, have also led to mixed

findings and made it difficult to estimate the effect size (Ahmad & Schroeder, 2003; Armstrong, 2006b; Aswathappa, 2013; Beenen et al., 2017). Therefore, to overcome these weaknesses, there is a need to bring modifications in traditional research designs. More conceptual and empirical study also needs to find evidence for the causal linkages between HR practices and performance relationships.

This study used a correlational approach and adopted a survey research design to analyze the relationships between high-performance work systems and organizational performance of the banking sector in Pakistan. Cross-sectional data were collected from employees, using the questionnaire to examine the extent of HPWS. The questionnaires were distributed to employees working in the provincial/head offices. As per the requirements of the study, a predictive research design is used to examine the impact of HPWS on financial performance. For this purpose, the study is conducted in two phases. In the first phase, employees collected responses to find the extent of high-performance work systems. In the second phase, financial data of the banking sector for the same financial year was collected. Therefore, it is assumed to be an appropriate research design to examine the relationship between high-performance work systems and the financial performance of the banking sector.

Based on the literature review and theoretical framework, the following hypotheses were developed:

H₁: High-performance work system has a significant association with financial performance.

H₂: High-performance work system significantly affects return on assets.

H₃: High-performance work system significantly affects return on equity.

H₄: High-performance work system significantly affects earnings per share.

IV. DATA AND METHODOLOGY

The banking sector of Pakistan is classified according to the types of service provided to its customers. These include public sector banks (5), private sector banks (20), specialized banks

(4), foreign banks (4), and microfinance banks (10) (State bank of Pakistan, 2020). Depending upon their functions, these banks operate in different country regions. For this study, it wasn't easy to reach all banks in the country. Therefore, the head/provincial offices were selected for this study to obtain an immense illustration of the whole population. The specialized and foreign banks were excluded from the study because of their mismatch with study variables like population, financial data, area of work interest, etc.

V. DATA ANALYSIS

Structural Equation Modeling (SEM) is a method for determining the relationships between various components (Hair et al., 2017). However, the fact that PLS-SEM demonstrates factual methodology about the complex model's multivariate connections among the experimental and inactive factors (Vinzi et al., 2010), PLS-SEM was designed to clarify change

as well as differences based on ordinary least squares many regression (Gefen et al., 2003; Vinzi et al., 2010).

The data was collected from employees to measure high-performance work systems using the survey questionnaire adopted from the literature; however, the financial performance was estimated based on the secondary data from banks' annual reports. Convergent validity and discriminant validity are used to evaluate the measurement model. The present study used outer loading, Cronbach alpha, composite reliability, and average variance to determine convergent validity. In addition, the loadings-cross-loadings, Fornell-Larcker criterion, and HTMT are used to evaluate discriminant validity.

The structural model is also recognized as an inner model. Structural models have identified the relationship among latent constructs or variables, as shown in the theoretical framework.

VI. RESULTS

Table 1: Frequency Distribution Gender

Gender	Count	Percentage	Acc. Percentage	Mean	SD
Male	250	64	64	1.510	0.501
Female	142	36	100		

The frequency distribution of gender reveals that 250 respondents were male, 64 percent of total respondents, while 142 respondents were

female, 36 percent of total respondents, with a mean value of 1.510 and standard deviation of 0.501. The results are reported in table 1.

Table 2: Frequency Distribution Total Experience

Range	Count	Percentage	Acc. Percentage	Mean	SD
Less than 1 year	111	28.31	28.31		
1 to 5 years	152	38.8	67.11		
5 to 10 years	79	20.2	87.31	2.003	1.428
More than 10 years	50	12.75	100		

Table 3: Frequency Distribution Experience in Organization

Range	Count	Percentage	Acc. Percentage	Mean	SD
<1 year	104	26.53	26.53		
1 to 5 years	149	38	64.53		
5 to 10 years	70	17.9	82.43	1.83	1.402
> 10 years	69	17.6	100		

6.1 Assessment of reliability and validity

The outer loadings, composite reliability, and average variance extracted were used to test convergent validity. The significance of an individual item in measuring the latent concept is indicated by its loading. The outer loading threshold is more than 0.50. The composite reliability allows a more straightforward evaluation of item internal consistency when measuring the latent concept. The composite

reliability threshold is greater than 0.70. The average variance extracted is convergent validity's last and most important component. The AVE shows how much variance the latent construct captures in total. The threshold value is greater than 0.50 (Hair et al., 2019). The summary of the outcomes of the measuring model first-order was reported in Table 4, and the second-order was reported in Table 5.

Table 4: Measurement Model (Reliability & Validity) (First-Order)

Latent Constructs	Items	Loadings	Cronbach's Alpha	CR	AVE
High Performance Work System	Sel_2	0.862	0.837	0.902	0.754
	Sel_3	0.853			
	Sel_4	0.889			
	ES_1	0.882			
	ES_2	0.829	0.793	0.879	0.707
	ES_3	0.811			
	EP_1	0.732			
	EP_3	0.836	0.702	0.835	0.628
	EP_4	0.806			
	ICO_2	0.940	0.863	0.936	0.879
	ICO_3	0.936			
	TD_1	0.920	0.928	0.954	0.874
	TD_2	0.946			
	TD_3	0.938			
	RS_1	0.806	0.756	0.818	0.692
	RS_3	0.856			
PA_1	0.874	0.850	0.874	0.637	
PA_2	0.907				
PA_3	0.701				
PA_4	0.687				
Relationship Management	AUD_1	0.794	0.928	0.938	0.507
	AUD_2	0.751			
	AUD_4	0.724			
	AUD_5	0.786			
	AUD_6	0.681			
	AUD_7	0.692			
	OP_1	0.584			
	OP_2	0.526			
	OP_3	0.600			
	OP_4	0.590			
	OP_7	0.797			
	SA_1	0.743			
	SA_3	0.805			
SA_4	0.760				
SA_7	0.767				
Financial Performance	EPS_1	0.958	0.833	0.848	0.655
	ROA_1	0.719			
	ROE_1	0.728			

Note: SEL = Selection, EP = Employee participation, ES = Employee security, FP = Financial performance, ICO = Internal Career Opportunities, PA = Performance Appraisal, RM = Relationship Management, RS = Reward System, TD = Training and Development.

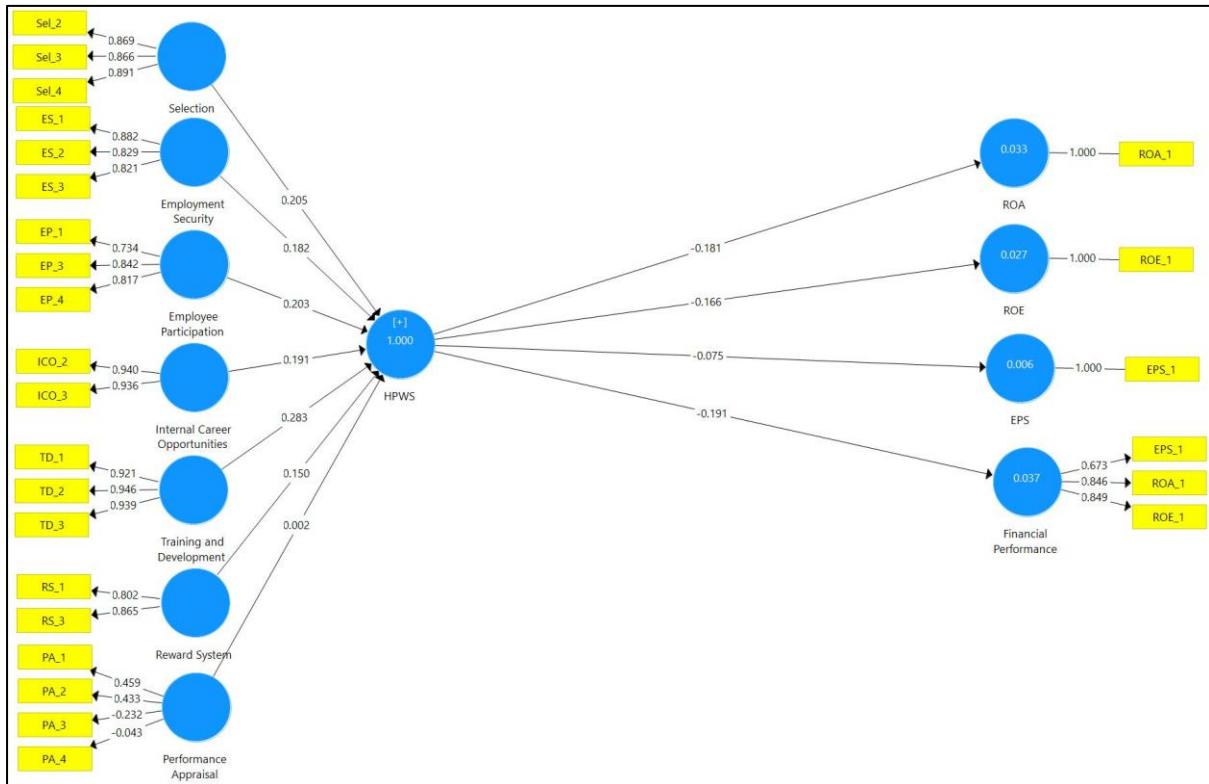


Figure 2: First-Order Measurement Model

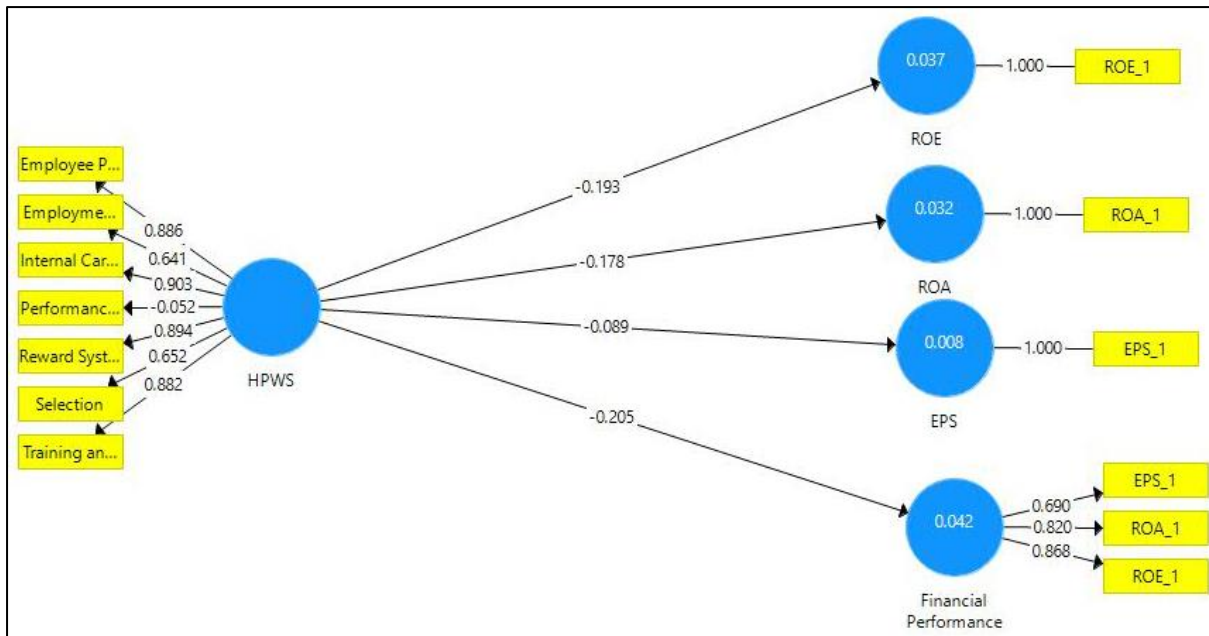


Figure 3: Second-Order Measurement Model

6.2 Assessment of discriminant validity

Discriminant validity describes how one latent construct differs from another latent construct and does not imply that other latent constructs in

the theoretical framework represent the same concept (Hair et al., 2017). The three possible techniques, (i) Fornell-Larcker criterion, (ii) cross-loading approach, and (iii) HTMT

technique, were reported in the current literature. The present study follows all three techniques to evaluate discriminant validity.

Table 5: Discriminant Validity (HTMT) (First-Order)

	SEL	ES	EP	ICO	PA	RS	TD	RM	FP
SEL									
ES	0.683								
EP	0.580	0.728							
ICO	0.061	0.063	0.060						
PA	0.465	0.279	0.489	0.104					
RS	0.114	0.141	0.108	0.053	0.041				
TD	0.567	0.678	0.527	0.092	0.485	0.120			
RM	0.844	0.235	0.706	0.087	0.641	0.053	0.711		
FP	0.388	0.885	0.359	0.083	0.171	0.071	0.407	0.434	

Note: SEL = Selection, EP = Employee participation, ES = Employee security, FP = Financial performance, ICO = Internal Career Opportunities, PA = Performance Appraisal, RM = Relationship Management, RS = Reward System, TD = Training and Development.

6.3 Assessment of Structural Model

The structural model is also recognized as an inner model. Structural models have identified the relationship among latent constructs or variables as shown in the theoretical framework. Moreover, the theoretical model has one independent second-order model, one mediating, and one dependent variable (Hair et al., 2013). As described earlier, the endogenous construct is referred to as a dependent variable, an exogenous construct is known as an independent variable of the study, and an intervening variable is known as mediating variable.

6.4 Direct Relationship

The present study reported the results of structural model assessment using the coefficient beta, standard deviation, t-value, and p-value to evaluate the proposed relationship among the latent constructs using bootstrapping at 5,000 sample re-sample (Ramayah et al., 2018). The results of the direct relationship among the latent construct were reported in table 6.

The study's second hypothesis was concerned with evaluating the association between a high-performance work system and financial performance (H1). The result of the present study reveals that a high-performance work system is negatively and significantly linked

with a financial performance at a 95% confidence interval ($\beta = -0.346$, $p = 5.431$, $t = 0.000$). The findings of the present study are well aligned with recent literature. The second sub-hypothesis of the study was to evaluate the association between a high-performance work system and return on assets (H2). The result of the study reveals that a high-performance work system is negatively and significantly linked with the return on assets at a 95% confidence interval ($\beta = -0.329$, $p = 4.706$, $t = 0.000$). The findings of the present study are well aligned with recent literature. The second sub-hypothesis of the study was to evaluate the association between high-performance work systems and return on equity (H3). The result of the present study reveals that a high-performance work system is negatively and significantly linked with the return on equity at a 95% confidence interval ($\beta = -0.158$, $p = 2.084$, $t = 0.037$). The findings of the present study are well aligned with recent literature. The second sub-hypothesis of the study was to evaluate the association between a high-performance work system and earnings per share (H4). The result of the present study reveals that a high-performance work system is negatively and significantly linked with the earning per share at a 95% confidence interval ($\beta = -0.293$, $p = 4.016$,

t=0.000). The findings of the present study are well aligned with recent literature. The findings of the study are well aligned with recent literature. The results of the direct relationship were reported in table 7.

Table 6: Direct Relationship

Hypothesis	Relationship	Coeff.	SD	T-Values	P Values
H1	HPWS -> Financial Performance	-0.346	0.064	5.431	0.000
H2	HPWS -> ROA	-0.329	0.070	4.706	0.000
H3	HPWS -> ROE	-0.158	0.076	2.084	0.037
H4	HPWS -> EPS	-0.293	0.073	4.016	0.000

Note: We use 95% confidence interval with a bootstrapping of 5,000

Note: ***p<0.01 (t=>2.33), **p<0.05 (t=>1.96), *p<0.1 (t=>1.64)

VII. DISCUSSION AND RECOMMENDATIONS

The result of the present study affirms that high-performance work systems substantially affect financial performance; hence we accept hypothesis 1. Furthermore, the results reveal that a high-performance work system significantly influences the return on assets; hence we accept hypothesis 2. Moreover, the result of the present study affirms that a high-performance work system influence substantially the return on equity; hence we accept hypothesis 3 was accepted.

The results reveal that a high-performance work system significantly influences the earnings per share; hence we accept hypothesis 4. Moreover, the result of the present study affirms that a high-performance work system influence substantially the earnings per share; hence we accept hypothesis 4 was accepted.

7.1 Conclusion

The linkages between HPWS and organizational performance in the banking context of Pakistan have been examined, and found significant associations between HPWS and various performance outcomes. The current study's findings are consistent with numerous previous studies that investigated and found that HPWS positively relates to firm performance (Gittell et al., 2010; Liao et al., 2009). In addition, research findings suggested that various employees perceive an identical set of HPWS distinctly. The most significant findings from this study are that

relationship management is an essential link between HPWS and financial performance.

Furthermore, the degree of relationship management partially mediated the influence of HPWS performance outcomes. This study has contributed a lot of implications for bank management and HR professionals by providing insights into the mechanism through which HPWS influences the banks' financial performance. The empirical evidence supported a lot for facilitating the important stakeholders in the design of HPWS and plans for accomplishing relationship management among employees.

7.2 Policy Implications

In addition to relating findings to the current HPWS literature, this study also presents recommendations for principal stakeholders such as employees, bank top management, and HRM function. Firstly, the study suggests that the staff working in non-managerial positions are important stakeholders and should be involved while designing the HPWS. In line with (Han et al., 2020), it is expected that where managers and employees are certain about the HPWS, and both provide support in developing and implementing plans to achieve relationship management, performance outcomes should be achieved improved.

Secondly, the finding of this study provides significant implications for top management of the organizations whose focal point is likely to be on accomplishing the business goals and economic performance. The degree of relationship management between employees

indicates that when top management provides a coordinated approach and HR function is entrusted to work with employees to establish the social context (Dastmalchian et al., 2020) for productive HRM, it is expected to generate better performance results.

Finally, for HR professionals, this research highlights that the impact of HPWS on performance outcomes can be accounted for by implementing the relationship management process within the banks in this study. This clearly points out that for HRM function to accomplish a vital impact, HR professionals must work jointly and improve coordination with their associates (Rhee et al., 2020) who are in charge of administering the main operations of organizations. HRM function can also make efforts with managers to assist the progress of positive outcomes from the HPWS.

7.3 Future Research Direction

This study has contributed a lot to examine the mediating role of relationship management between HPWS and banks' financial performance. Still, there is much room for further studies to be conducted to determine how HPWS may increase organizational performance.

Longitudinal Study: Keeping in view the time constraint while examining the HPWS and the performance, a longitudinal research design may be used to investigate the dependent, mediating, and dependent variables within the services sector in different continuous periods in the future.

More aspects of HPWS: Research may be conducted to investigate the role of relationship management among employees to test the generalizability of these findings across the whole financial sector and to figure out thoroughly whether contextual factors influence employee-to-employee relationships.

Different levels of Performance: In future studies, it might be possible to use a different level of performance outcomes, such as function level performance, to examine in much greater

depth the mediating role of relationship management among employees within the function and its impact on the performance of their function.

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