

Internally Oriented High-performance Work Systems and Organizational Performance: Empirical Evidence from Banking Sector in Pakistan

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Abstract

This study analyses the influence of high-performance work systems on organizational performance. As, previous studies have mostly focused on individual HR practices in determining the influence of HR practices on performance so research is needed to analyze the combined effect of HRM practices as system to understand the importance of HR on performance. Based on AMO framework, this study investigated the effect of HR system on organizational performance using employees' perspectives in highly interdependent work settings. In this study, primary data was obtained from 218 bank branches in collaboration with Institute of bankers Pakistan and bank management in the form of managers' and employees' perceptions about HPWS and its effect on performance. Results suggest that HPWS was significantly linked to deposits, advances and unit level profitability. Results pointed out new insights to HPWS-performance literature from employees perspectives.

Key Words

AMO, HPWS, Pakistan,
Branch Performance,
HRM Practices

Introduction

Prior research findings provided profound evidence associating system of HR practices and performance (Delery & Doty, 1996). Although researchers are of the view that employees' perspective of the HRM are essential in developing the relationship among HRM-performance link, research in the field has mainly used management perspectives in examining HRM-performance link (Liao et al., 2009). Through this way, the actual experiences of individual employees with these HRM practices are mostly ignored, that limits the process linking HRM practices with performance (Lepak et al., 2006).

Researchers have proposed several types of outcomes such as HR, organizational, financial, and market outcomes which might apply to research relating to HRM (Dyer & Reeves, 1995). These authors have proposed that studying the HRM-performance link is important to analyze the relationships regarding HRM-performance linkages. Previous studies have been conducted in developed countries in the West (Boselie et al., 2001). There are limited number of studies being carried out to test the linkages in developing countries like Pakistan.

In view of the above issues, there is a need to study the linking of HPWS and organizational performance. Therefore, it is aims to investigate the linkages through which HPWS influences performance. Specifically, the research question and hypotheses of this study are:

Research Question

Is there a positive link between HPWS and performance in Pakistan's banking sector? Furthermore, this study has taken up an employee perspective to acquaint their actual experiences with HPWS that linkages in the HPWS and organizational performance can be recognized more certainly. Through this research, it is expected to develop this initial analysis in such a way that it contributes to existing literature on HPWS and performance.

Literature Review

High-Performance Work Systems

The term high-performance work systems (HPWS) have received greater attention in the HRM literature (Lepak et al., 2006). According to Zacharatos et al. (2005), HPWS has an extensive

scope as it encompasses the main features of high-commitment and involvement approaches. Numerous studies have highlighted the significance and argued that in organizations it is an HR system that accurately reflects paths through which HR policies influence the successful implementation of organizational strategy (Becker & Huselid, 1998). Results suggested the influence of HR practices can be better analyzed by considering HR system (Lepak et al., 2006). Previous studies have used a wide range of HR practices as HR system (Snape & Redman, 2010). 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 systems.

Overall, HRM systems influence organizational performance through their effects on the KSA needed by employees to function, along with high level of motivation to exert efforts and opportunities to show capabilities in execution of job performance. Resultantly, these processes improve job satisfaction and provide support to employees in accomplishing their assigned task in an effective manner. These consequently decrease turnover intentions and enhance performance (Becker & Huselid, 1998).

Bank Performance

A considerable amount of literature has been published on bank performance. There are several uses of bank's performance analysis. For example, bank regulators use it to determine the response of banking sector to the introduction of banking regulations, effectiveness of new regulations, its overall impact on banking system, and future policies regarding banking sector. Similarly, bank management also use performance analysis to determine the effectiveness of bank resource allocation, impact of structural modifications on overall operations, and align its business operations with the profitable trends (Paradi et al., 2011).

In order to examine the performance of a bank, ratio analysis has been adopted as a standard technique by industry regulators and bank management. Ratios are mostly related to firm's performance, financing, profitability, and liquidity (Norton & Porter, 2012). Ratios can be used to evaluate performance with competitor firms, and overall industry to gauge firm performance. Ratio analysis serve as a tool to analyse firm's financial information and provide useful insight into various aspects of the firm's operations such as risk management, quality of assets, profitability, capital adequacy, and liquidity functions (Stolowy et al., 2013).

Various users of financial information have particular purposes for analysing a firm's financial performance. For instance, a bank is interested mainly in the likelihood that a bank loan will be repaid. A shareholder, on the other hand, is interested with a reasonable return on the invested amount. Therefore, being a useful tool for different users of financial statements and analysis, financial ratios has a number of advantages. Therefore, various key performance indicators have been intended to provide a better picture of the firm from various perspectives. There are various databases that provide financial information, rankings, trends and financial ratios about firms in the industry. In many countries central banks are maintaining databases of financial information. Being a regulatory body of banking system in a country, each bank is required to provide financial information and periodic reports to central bank of the country. These KPIs can be used for ratio analysis to evaluate banks performance.

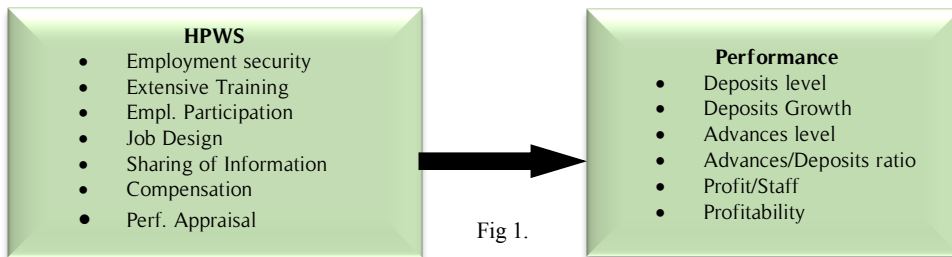
Theoretical Perspectives linking HPWS to Organizational Performance

Recently, the focus is to test not only links but also to explore the process of HPWS and performance. The association between human resources and organizational performance can be traced back to Adam Smith's (1776) consideration for not only quantitative labor inputs but also for competencies such as skills, expertise, and understanding of how to work in organization. Over recent decade's human capital, the RBV of the firm, and AMO (Abilities, Motivation and Opportunity) administered a platform for understanding the HRM-performance links. The elementary principle that provides the base for human capital theory is the understanding that employees' learning potential is comparable to various other organizational resources. Therefore, it suggests that employees are a form of capital, and a focus on its effective utilization can result in high performance (Liao et al., 2009).

On the other hand, the RBV suggests that the growing acknowledgment of firm's resources earned validity to the contention suggesting employees are critically vital to organizational accomplishment (Wright et al., 2001) and organizations build up their advantage through taking, promoting and adequately utilizing resources to achieve desired results (Barney, 1991; Colbert, 2004). The AMO framework suggests that firms can achieve various advantages having HRM system that workers have appropriate levels of abilities and skills, adequate benefits for motivation, and better opportunities for participation in decisions. Together, these approaches provide the base for studies which examine the HRM-performance links. Previous studies highlighted the importance of HPWS for performance and argued that technologies and innovative work processes can do little to improve firm's performance unless the firm adopts appropriate an HR system (Huselid, 1995; Arthur, 1994; Guest et al., 2003). Previous studies tested various combinations in analyzing performance outcomes (Paauwe, 2009). A large number

of researchers have backed their choice of practices on the list of 16 HR practices proposed by Pfeffer (1998) and found significant effects of HR practices on performance in various settings.

Several studies have suggested that HR practices such as employee selection, problem-solving teams, extensive training, decentralised decision making, flexible work assignments, contingent compensation, and open communication effect various aspects of a firm's social structure, including the development of cooperation patterns, organizational citizenship behaviour, connection links among employees, and common mental models (Evans & Davis, 2005). Therefore, using employee relationships, this study suggests that in highly interdependent work settings, HPWS can enhance organizational performance.



Methodology

This study adopted survey research design to examine the HPWS-performance linkages at the unit level (Bryman, 2004). The information regarding the perspectives of managers and employees' in relation to HPWS were gathered at a single point (Babbie, 2004). Data was gathered from the officer cadre employees functioning in the cash, credit and operations of bank branches. In the first instance, managers' and officers' perceptions were gathered via survey from a large sample of 218 bank branches. Secondly, data regarding performance outcomes of the bank branches was gathered after 6 months on completion of financial year from head office and regional offices.

Hypotheses

In order to answer the research question regarding the effects of HPWS on performance in Pakistan's banking sector, the following hypotheses were developed.

Hypothesis 1: HPWS is positively linked to branch deposits to staff performance.

Hypothesis 2: HPWS is positively linked with branch level growth in deposits performance.

Hypothesis 3: HPWS is positively linked with branch level growth in advances performance.

Hypothesis 4: HPWS is positively related to branch level advances to deposits performance.

Hypothesis 5: HPWS is positively linked with profit to staff level.

Hypothesis 6: HPWS is positively associated with growth in profit.

Measurement

This study focus on seven important and most relevant high performance work practices (Lepak et al., 2006) including 1) job security, 2) extensive training, 3) employee participation, 4) job description as role clarity, 5) information sharing, 6) performance based compensation, and 7) performance appraisal. Job Security, extensive training, employee participation, and role clarity were measured using items from Delery & Doty's (1996). Information sharing and performance based compensation items were adopted from Zacharatos et al. (2005). Performance appraisal was measured using items from Singh, (2003); Delery & Doty (1996); and Scott & James, (1992). An HPWS unitary index was developed using an additive approach for aggregating high performance work practices into an index. For branch level performance, identical set of branch level performance measures including deposits, total advances, and branch profit per accounting period were gathered across 120 bank branches (Wright et al, 2005; Gelade & Ivory, 2003).

Population and Sample

This study has been administered in a large public sector bank in Pakistan. The bank has a branch network of more than 1300 across the country (State bank of Pakistan, 2012). A large sample of 218 branches were selected through

a two-step proportionate random sample using the following procedure. Table 1 provides details about the nationwide branch network. On the basis of 45% proportionate sampling, completed surveys were received from 218 branches with an overall response rate of 64%.

Table 1. Sampling of the Bank Branches

Areas	Central Punjab	Federal Areas	KPK	Total
Surveyed Branches	160	83	97	340
Received HPWS and RC Branches	61	71	86	218
HPWS and Performance Matched Branches	35	46	39	120

Prior approvals were solicited from the Bank head office and concerned regional offices regarding the study. The survey was conducted with the help of Bank's central and regional HR departments. Following the completion of HPWS survey, branch performance measures were collected on completion of financial year for 120 branches on matched criteria of HPWS and performance data.

An overview of respondents' age suggests that most of the employees are young professionals with a relatively balanced age workforce. For instance, more than half of the respondents (59%) are in the age group of 25 to 40 years. A large percentage of respondents are holding Masters in Business Administration (67%). The branch managers are 20 percent of the respondents. A large number of respondents (39%) are working in operations function. Most of the respondents (45%) in the branches have less than a year time in the current branch.

Results and Findings

The data obtained from managers, officers and branch level performance outcomes were analyzed using several techniques including factor analysis, scale reliability, inter-rater reliability, descriptive and inferential statistical analysis. Cronbach alpha reliability coefficient was used to evaluate the internal consistency of each measure of HPWS. Cronbach alpha coefficients for the overall extent of HPWS scale was 0.894.

In this study, intra-class correlation was computed using two way mixed and random models. The values of ICC (1) for HPWS value exceeded suggested values of 0.05 to 0.3 and the values of ICC (2) was also more than approved of 0.70. These results support explanation for additive approach and considering HPWS as a unit-level construct.

Table 1a. Reliability and Validity Analysis for HPWS

Departments	Intra-class (1)	Intra-class (2)	Intra-class (1)	Intra-class (2)	Inter-rater Agreement
	Two-way model		One-way model		Rwgi HPWS
Manager	0.265	0.904	0.273	0.912	0.94
Operations	0.260	0.901	0.281	0.914	0.92
Credit	0.238	0.890	0.241	0.902	0.95
Cash	0.185	0.855	0.191	0.864	0.90
Survey	Items	Alpha	Survey	Items	Alpha
Employment security	4	0.611	Information Sharing	3	0.701
Extensive Training	4	0.738	Compensation	3	0.601
Emp Participation	4	0.812	Performance Appraisal	5	0.854
JD	3	0.834	HPWS	26	0.894

High Performance Work Systems and Branch Performance

Table 2 provides regression results for HPWS and bank branch performance outcomes in terms of deposits, advances and profitability. Regression results showed that HPWS was significantly linked with branch level performance outcomes. Specifically, to test hypothesis 1 related to deposits level of the branches in relation to the number of staff, branch performance of deposits level was regressed with HPWS index. In model 1, control variables were also included in the model to assess the effects of control variables.

When HPWS was added, regression model explained further 4% ($\Delta F = 33.78$, $p < 0.001$) variance in the level of deposits to staff variable beyond the control variables in Model 1. These results indicated positive association in the extent of HPWS and level of deposits to staff ($\beta = 45.38$, $p < 0.001$). Overall, Model 2 explained 6% of variance in level of deposits to staff ($F = 8.22$, $p < 0.001$).

Growth in the deposits of branches also showed significant positive relationship with the extent of HPWS ($\beta = 16.38, p < .001$). Model 2 explained an additional 2% ($\Delta F = 16.21, p < 0.001$) variance in deposits growth as compared to restricted model (Model1). In terms of growth in advances, the results indicates that the extent of HPWS showed negative association with growth in advances ($\beta = -20.50, p < 0.001$). Further analysis showed that the dummy variable for experience was also negatively associated with growth in advances ($\beta = 14.58, p < 0.05$). The effect of HPWS on branch performance in terms of being short of liquidity, regression coefficients of branch advances to deposits performance was significantly linked with advances to deposits (column 11) considered as the liquidity of the branch. On addition of HPWS, Model explained an additional 2% ($\Delta F = 19.31, p < 0.001$) of variance in advances to deposits ($F = 3.57, p < 0.001$).

In terms of HPWS and branch profit to staff performance, the regression coefficient ($\beta = 1.13, p < 0.001$) indicated significant positive association between the extent of HPWS and profit to staff. When HPWS variable was added to the model it explained an additional 2% ($\Delta F = 18.88, p < 0.001$) variance in employee productivity. Model shows 4% variance in branches' profit to staff ($F = 5.05, p < .001$). Regression results analyzing the effect of HPWS on the growth in branch profit also revealed significant positive association between the extent of HPWS and growth in profit ($\beta = 74.20, p < 0.001$). Adding HPWS, model explained 3% ($\Delta F = 25.27, p < 0.001$) variance in growth in profit beyond the control variables in Model. It accounted for 3% of variance in branches' growth in profit ($F = 4.30, p < 0.001$). These results suggest that HPWS significantly affect branch performance. Results from hierarchical regression provided strong support for hypotheses 1 indicating that HPWS is positively linked to branch level performance.

Table 2. Regression results HPWS and Branch Performance

Variables	Deposits/ staff		Deposits growth	Advances growth	Advances/ Deposits	Profit/ Staff	Profit growth
	M1	M2	M2	M2	M2	M2	M2
Age	-16.15	-13.47	.59	10.67	.03	-.44	17.96
Qualification	-4.53	-2.18	-2.85	.96	.06	-.21	7.07
Experience	18.54	15.70*	2.22	-14.58*	-.03	.32	2.52
Gender	-21.0	-19.35***	-3.75	-1.19	.02	-.40*	-2.18
Function	6.58	4.97	-2.28	-.50	.04	.05	4.89
Length service	2.20	1.09	4.48	2.19	-.06	.38*	2.22
HPWS	--	45.38***	16.38***	-20.50***	-.30***	1.13***	74.20***
R	.16	.25	.17	.15	.17	.20	.18
R ²	.025	.061	.030	.020	.030	.040	.031
Adjusted R ²	.019	.054	.021	.014	.02	.031	.025
ΔR^2	--	.04	.02	.01	.02	.02	.03
F	3.81***	8.22***	3.74***	2.74**	3.57***	5.05***	4.30***
ΔF	--	33.78***	16.21***	12.02***	19.31***	18.88***	25.27***

Control variables: age, qualification, experience, gender, function, and length of service in branch

Independent variable: High performance work Systems (HPWS)

Dependent variable: Deposit/staff, Growth deposits, Growth advances, Advances/deposits, Profit/staff and Growth profit, N = 887, Total branches = 120, *P< .05, **p< .01, ***p< .001

Discussion

A strong linkage has been reported in HRM-performance studies (Combs et al., 2006). This research also tested essential relationships within the framework between HPWS and performance outcomes. Findings from this study also present evidence suggesting significant role of HPWS and its influence on organizational performance, persistent with those of Vlachos (2008) and Guthrie et al. (2009). Despite the variation in the performance outcomes, findings are in consistence with previous research (e.g. Liao et al., 2009). These findings also highlight the importance of HPWS as Huselid (1995) pointed that HPWS has the ability to improve KSA of the organization's prevailing and potential workers, develop high level of motivation, lessens sense of avoiding accepting responsibilities, and further enhance retaining competent employees. HPWS mainly aim at developing favorable advantages which might be achieved by competent employees via proper HRM practices that focus on treating employees with due respect, aimed at employees' development and build up trust in top management and boost

commitment in relation to achieving organizational goals. The implications of this study suggest that during the development of this transformation, both researchers and practitioners need to have focused on probing to understand which HRM strategies are most productive in various business environments.

Implications

This study extends HPWS and performance literature by examining managerial and employees' perceptions with regards to HPWS and organizational performance. Results indicated significant implications for bank management and officers that as relevant partners, managerial cadre employees must be involved in formulating HPWS and planning for accomplishing high performance.

Conclusion

This study concludes that the influence of HPWS on performance in banking sector has high level of interdependency, uncertainty, and is time bound. Results provide complete support for hypotheses in relation to the research question relating the relationship between HPWS and organizational performance in the banking sector of Pakistan, as most of the relationships described are found to be statistically significant. Together, these findings crucially analyze the process through which HPWS influences organizational performance, and also highlight the significance of incorporating employees' perspective in the role of HPWS effects on organizational performance.

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