Role of Relational Coordination and HR practices: An Understanding of Branch Performance in Banking Sector

Muhammad Siddique
Mohammad SohailYunis
Institute of Management Sciences

Abstract
This paper aims to determine the role of relational coordination among employees in improving the performance efficiency in relation to unit-level performance in the banking sector of Pakistan. Underpinning on relational coordination theory, this paper examines the relationships between various Human Resources (HRM) practices in predicting relational coordination that affects unit-level performance in highly interdependent work settings. This research has been conducted in the banking sector of Pakistan. Employees' perceptions about the extent of seven identical HRM practices and relational coordination are obtained through a personally administered survey in 218 sample branches. Utilizing hierarchical regression, empirical evidence indicate that various HRM practices have different effects in predicting relational coordination in terms of communication and relationship ties among bank branches. Results show that both communication and relationship ties of relational coordination are significantly related to branch level deposits, advances and overall profitability. These findings provide novel contributions to HRM and performance literature, suggesting what needs to be done in terms of HRM practices that can result in improving the potential of enhancing communication and relational ties of relational coordination among employees. This study concludes that a coordinated approach to HRM practices and relational coordination on the part of bank's HRM department to liaison with branch management and develop better levels of communication and relational ties that would ultimately lead to higher performance.
Keywords: Employee relational coordination, HPWS, interdependence, organizational performance, financial sector, Pakistan

Previous research has provided compelling evidence linking systems of human resource management practices to organizational performance (Arthur, 1994; Becker & Gerhart, 1996; Combs et al., 2006; Delery&Doty, 1996; Gong et al., 2009; Huselid, 1995). Although there is a general agreement that systems of HRM practices affect performance outcomes, researchers continue to ask how HRM practices affect performance outcomes (Becker & Gerhart, 1996; Lepak, 2007).

Researchers have suggested that an accurate understanding of the links between HRM practices and performance outcomes is needed in order to make accurate inferences regarding the HRM and performance relationship (Guest, 1997; Wall &Wood, 2005). Researchers have often assumed two broad perspectives of "system approach" and "strategic perspective" to examine the link between HR practices and performance outcomes. In the system approach, the focus has shifted from individual HR practices to an overall large-scale focus on the set of HR practices

and organizational outcomes (Bowen &Ostroff, 2004), while the strategic perspective mainly focuses on how the firm's HR practices are consistent with the strategic direction of the organization. Taking these perspectives together, the links between HR practices and performance have been conceived in a variety of ways (Wall &Wood, 2005). Despite the fact that these perspectives assumed multilevel relationships between HR practices and take a macro approach.

Coordination is a term frequently used in the literature to understand a process through which various activities of a job are accordingly regulated and interlinked (Faraj&Xiao, 2006). Traditionally, coordination has been considered by theorists to be an information-processing challenge (e.g. Galbraith, 1977; Tushman&Nadler, 1978). Over time, the term coordination emerged to be considered as a relational process as well, including shared perceptions of the work and its context (Crowston&Kammerer, 1998; Faraj&Sproull, 2000). Relational coordination is considered to be a developing theory for distinguishing the relational dynamics of coordination. Theorists such as Malone and Crowston (1994) have advocated the importance of relationships for jobs that require coordination, basing their argument on the premise that "coordination is the management of task interdependence" (p. 90). Thus, it is essential to clarify exactly what is implied by relational coordination. The word relational coordination is generally understood to mean coordination among group members informed by relationships in the performance of interdependent work (Gittell, 2001). Together, these networks of communicating and relating can be considered to provide a structure of firm social capital, which is likely to improve firm performance (Leana & Van Buren, 1999). Relational coordination reflects the degree to which members are aware of the relationship between their role and the functioning of the whole, as well as an understanding of other fellow members in performing the work processes. Gittell, Seidner and Wimbush (2010) found that relational coordination among multiple workgroups mediated the effect of HPWS on key performance outcomes.

HPWS and their Relationship with Performance

A large body of the HRM literature suggested that HRM practices have had a compelling impact on organizational performance (Arthur, 1994). There are several theoretical perspectives explaining the relationship between HPWS and performance (e.g. Appelbaumet al., 2000). Over recent decades the RBV and the AMO framework provided a foundation to theoretically understand the link between HRM and organizational performance.

In the last few years, researchers have tended to focus on investigating the process through which HR practices affect organizational performance, often referred to as the "black box" in the

HRM literature (Boselieet al., 2005). However, there is a lack of consensus with regards to the causal link through which HPWS influence performance. Several models are based on the assumptions that better HR practices are considered to result in highly committed, motivated, and better skilled employees, who, in return can be more productive to affect performance (Ostroff& Bowen, 2000). Research suggests that organizations can initiate and assist employee-based capabilities through high performance work practices (Wright et al., 2001), and that the suitability of a set of HRM practices depends on the capability that an organization is contesting to promote (Snell et al., 1996).

In this view, HRM systems are expected to enhance performance by improving the knowledge, skills, and abilities of employees (KSA), enabling them to better use their efforts in service of organizational goals, and providing them with motivation to exert greater effort to perform their jobs. A considerable number of HRM studies propose that HRM systems devised to improve employees' skills, motivation, and performance are related to higher productivity (Datta et al., 2005), lower employee turnover, and improved organizational performance (Huselid, 1995). Explaining the processes through which HRM systems influence performance, researchers have pointed that high performance work practices function through their impact on (a) improving employees' skills, knowledge, and abilities, (b) motivating employees to exert effort, and (c) providing them opportunities to perform their work (Combs et al., 2006). In sum, HRM systems influence performance through knowledge, skills, and abilities required by employees to perform, motivation and opportunity to express their talent in the performance of their jobs. Together, these processes enhance job satisfaction, and support employees in working effectively and making effective decisions, thus decreasing employee turnover and enhancing organizational performance (Becker et al., 1997).

Relational Coordination as a Causal Mechanism between HPWS and Performance

Several studies have considered coordination to be a relational process (Bechky, 2006), and have suggested that both communication and relationship ties among employees are vital for achieving organizational performance, particularly when work is highly interdependent (Adler et al., 2008; Gittell, 2000). From this perspective HPWS can be seen as a way to develop the employee relationships that are needed to achieve effective coordination. For instance, Gant et al. (2002) pointed out that high performance work practices affect the social networks of employees. The findings of Gant et al. (2002) indicated that as a result of HPWS such as selection, training and development, job design, team work and communication, employees have more substantial communication networks and showed higher performance. These results suggest that the social system of

relationships might comprise the link between HPWS and firm performance outcomes.

Conceptual Model and Research Questions

This study proposes that HPWS designed to foster the degree of relational coordination will result in enhanced firm performance. Figure 1 illustrates a multi-level model of the processes associating HPWS with organizational performance. In this model the first research question is proposed that HPWS positively predict the degree of relational coordination among employees at individual, functional and unit levels. To explore the mechanism through which HPWS affect organizational performance, the second research question proposed that HPWS affect relational coordination among employees at the branch level, and the degree of relational coordination in turn mediates the impact of HPWS on overall branch performance, suggesting a relational link through which HPWS work. The proposed hypotheses of this study are tested with data obtained from multiple sources including managers, officers from operations, and credit and cash functions across 218 bank branches.

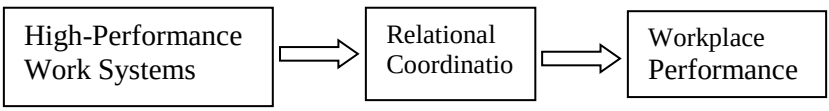

Figure 1. Research Framework

Research Methodology

Setting

This research used survey research design with a correlational approach to study the relationships between HPWS, RC and branch level performance outcomes (Rungtusanathamet al., 2003).A self-completion survey was administered to a large sample of bank officers working in operations, credit, and cash functions at a branch level. This study adopted predictive research design to determine the influence of HPWS on performance (Wright et al., 2005). For this purpose, in the first phase, employees' responses about the extent of HPWS and relational coordination were collected through a personally administered questionnaire from 218 bank branches. In the second phase, the bank performance at the unit level was obtained subsequently after the completion of bank's financial year.

Measurement of Variables

HPWS Unitary Index. This study follows an additive way of aggregating HPWS index (Ostroff & Bowen, 2000). Researchers have considered additive approach as more comprehensive that endures missing practices and reflects the whole composition of the system (Becker & Gerhart, 1996). Therefore, consistent with the HPWS

literature, subscale scores were calculated by averaging across all items of the same HR practice (Zacharatoset al., 2005). An average across the seven individual practices was used to create an index of HPWS for each respondent. The subscale aggregation method for each practice and HPWS index were justified by the high value of internal consistency across scales.

Relational Coordination. RC was measured using the RC survey from Gittell (2001). The RC survey is a fully validated seven question instrument that measures the communication and relationship ties between participants around the focal work process in highly interdependent work settings. Responses to these items were measured using a 5-point Likert scale. Subscale aggregation was followed to calculate an index of relational coordination for each respondent, functions, and branches across all items of the RC survey.

Branch Performance Measures. Bank performance was assessed in relation to making use of capital and labor to generate deposits and advances. Financial information about the branch performance in terms of deposits/staff, growth in deposits, growth in advances, advances/ deposits, profit/staff, and growth in profit were collected from 218 branches for three years. Overall, these financial measures have been adopted for their capability to assess bank management efficiency, liquidity, profitability and bank's capital adequacy (Paradiet al., 2011).

Participants, Sample, and Data Collection

This research has been administered in the banking sector of Pakistan. Being the 36th largest country by area (796095 square km) with an estimated population of 183 million (2011), it was difficult to reach all banks in the country. Therefore, in order to obtain anillustration of the whole population, a large bank with a nationwide branch network of more than 1300 branches and agency relationship with more than 3000 banks worldwide was selected for this study (State Bank of Pakistan, 2012).

Information about the extent of HPWS and relational coordination was obtained from managers and officers working in operations, credit and cash functions in a sample of 340 branches. Firstly it was decided to include bank branches of central Punjab, federal areas Islamabad, and Khyber Pakhtunkhwa for the survey. Secondly, a random sample of 45% branches was drawn from each area to represent proportionate participation of branches from all over the country. On the basis of 45% proportionate sampling, a sample of 340 branches was drawn from a total of 755 branches in Punjab, Islamabad, and KPK. These branches were surveyed during August to October 2011. Overall response rate for the HPWS and relational coordination surveys was 64%.

Overall, 3500 questionnaires were distributed among employees. Two separate questionnaires were developed for manager(s) and officers in operations, credit, and cash functions to seek perceptions about HPWS and relational coordination both within and between various functions at the branch level. In total, 2280 questionnaires were returned, of which 1563 questionnaires were usable. Branch level performance data was collected and matched with surveyed branches after six month following the survey. Overall, 120 branches provided performance data that matched the performance criteria of common key performance indicators.

Reliability and Validity

Reliability analysis was conducted using Cronbach alpha coefficient and inter-rater correlation coefficients (ICC 1 and ICC 2) to establish the internal consistency of the items for each scale. In addition to reliability, interrater agreement (IRA) was computed to determine the validity of the extent of HPWS and the degree of relational coordination as a unit level construct.

Table 1 provides reliability analysis results for the extent of HPWS and the degree of relational coordination scales. In this study, Cronbach alpha coefficient values for each scale are approximately equal of more than the recommended level of 0.7. Cronbach alpha coefficients for the overall extent of HPWS and the degree of relational coordination scales were 0.894 and 0.851 respectively.

Table 1. Reliability Analysis for HPWS and Relational Coordination

Survey Items	No of Items	Cronbach Alpha
Job Security	4	0.611
Extensive Training	4	0.738
Employee Participation	4	0.812
Role Clarity	3	0.834
Information Sharing	3	0.701
Performance Based Compensation	3	0.601
Performance Appraisal	5	0.854
Overall High Performance Work Systems	26	0.894
Relational Coordination	7	0.851

Interrater Reliability (IRR) refers to the relative consistency in the ratings provided by various judges of multiple items (Bliese, 2000; LeBreton et al., 2003) and is commonly used to justify aggregation of data. In this study, individual perceptions were aggregated to the branch level so correlations among dimensions could be determined (Liao et al., 2009). For this purpose, interrater reliability (IRR) was calculated to determine considering the extent of HPWS and the degree of relational coordination as a unit level construct. In this study intra-class correlation coefficients (ICC), the most commonly measure of IRR, were computed

to assure that aggregation of perceptions was empirically appropriate. The Intra-class correlation is commonly used when there are a number of different judges in the survey. The ICCs is interpreted as the proportion of the total variance within the data that is explained by the variance between judges. The value of the ICC ranges from 0 to 1, whereas the ICC value of zero suggests no consensus among judges and the ICC value of 1 propose a perfect consensus between judges. Two measures of intra class correlation coefficient ICC (1) and ICC (2) were computed for this study. In general, values from 0.05 to 0.3 are considered as common ICC (1) values, while ICC (2) values from 0.70 to 0.85 are being considered acceptable to justify aggregation (LeBreton & Senter, 2008). The values of ICC (1) and ICC (2) for both mixed and random models are reported in Table 2. For HPWS and relational coordination, ICC (1) values were well above the recommended level of 0.05 to 0.3 and ICC (2) also exceeds the recommended level of 0.70 and above. Together, these results provide justification for aggregation and treating HPWS and the degree of relational coordination as a unit-level construct.

Table 2. Intra Class Correlations for HPWS and Relational Coordination

Functions	ICC(1)	ICC(2)	ICC(1)	ICC(2)
	Two way mixed and random model		One way random model	
HPWS	0.245	0.894	0.227	0.884
RC	0.450	0.851	0.415	0.833

Validity Analysis

Interrater Agreement (IRA) refers to the absolute agreement in scores provided by multiple judges for one or two items (LeBreton et al., 2003; Bliese, 2000; James et al., 1993). Measures of the IRA are used to determine whether scores provided by judges are identical in terms of their absolute value. An additive approach is followed in this study to measure the perceptions of employees regarding the extent of HPWS and the degree of relational coordination. Interrater agreement was computed to ascertain justification for aggregation and determine the similarity of ratings within bank branches in an absolute agreement sense. The IRA was estimated for each dimension score using indices developed byJames et al. (1984). The most prominent estimates of the IRA are single-item $r_{wg}$and multi-items $r_{wg(j)}$ indices.The values of IRA indices ranges from 0 to 1 with values of 0.70 have been considered as the traditional cut point (LeBreton et al., 2003; Lance et al., 2006).

Table 3 provides results of interrater agreement using uniform distribution for this study. The average $r_{wg(j)}$ of HPWS for managers, employees in operations, credit, and cash functions were 0.93, 0.91, 0.92, and 0.89 respectively. These values exceed the recommended value of

0.70 suggesting a very strong agreement for managers, operations, and credit functions, and strong agreement for cash function. With regard to relational coordination, the average $r_{wg(j)}$ of the degree of relational coordination for managers, operations, credit, and cash functions were 0.91, 0.88, 0.87, and 0.87 respectively. Together, these reliability and interrater agreement (IRA) results provide significant support and justification for aggregating individual level scores to the branch level for the HPWS and relational coordination dimensions.

Table 3. Interrater Agreement for HPWS and Relational Coordination (IRA)

Functions	rwgj HPWS	rwgj RC
	Uniform distribution	Uniform distribution
Manager	0.93	0.91
Operations	0.91	0.88
Credit	0.92	0.87
Cash	0.89	0.87
Employee	0.91	0.88

Findings about HPWS, RC and Branch Performance

Results are shown in Tables 4 and 5. The model provides the results of the relationship between the extent of HPWS and the strength of relational coordination. The extent of HPWS showed a significant association with the strength of relational coordination with large coefficient. The results indicate that HPWS explained an additional 17% of variance in relational coordination beyond the control variables included in the modelat the branch level. Regression analysis of HPWS showed significant positive association with all performance measures, including deposits to staff, growth in deposits and advances, advances to deposits, profit to staff and growth in profit.

Table 4. Results of Analysis Testing Mediation of Relational Coordination

	RC	Level of Deposits to Staff			Growth in Deposits			Growth in Advances		
Variables	M1 (XM)	M2 (XY)	M3 (MY)	M4 (XMY)	M2 (XY)	M3 (MY)	M4 (XMY)	M2 (XY)	M3 (MY)	M4 (XMY)
Age	-.03	-13.47	-15.23	-13.49	.59	.47	.90	10.67	12.91	11.56
Qualification	-.03	-2.18	-3.70	-2.19	-2.85	-2.92	-2.55	.96	2.97	1.81
Experience	.01	15.70*	17.85*	15.71*	2.22	2.61	2.08	-14.58*	-16.63**	-14.98*
Gender	.05*	-19.35**	-21.54**	-19.32**	-3.75	-4.84	-4.29	-1.19	-1.04	-2.76
Function	-.02	4.97	6.57	4.96	-2.28	-1.71	-2.10	-.50	-1.24	.01
Length of service	.03	1.09	1.48	1.11	4.48	4.22	4.13	2.19	.88	1.17

HPWS	.45***	45.38**	--	45.70**	16.38**	--	11.25*	-20.5**	--	-35.2**
RC	--	--	17.17*	-.71	--	15.91**	11.51*	--	19.38**	33.19**
R	.43	.25	.18	.25	.17	.17	.19	.15	.15	.23
R^2	.18	.06	.03	.06	.03	.03	.04	.02	.02	.05
Adjusted R^2	.177	.054	.024	.053	.021	.023	.029	.014	.014	.046
ΔR^2	.17	.04	.01	.04	.02	.02	.0	.01	.01	.05
F	28.25**	8.22**	4.05**	7.18**	3.74**	3.92**	4.25**	2.74**	2.78**	6.31**
ΔF	185.7**	33.78**	5.34*	16.87**	16.21**	17.44**	11.95**	12.02**	12.24**	21.52**
Sobel test	--	--	--	-0.088	--	--	2.70**	--	--	5.12**

Note. X=HPWS, Y = Level of Deposit to staff, Growth in deposits, Growth in advances. M = Relational Coordination (RC), *P < .05; **p < .01; ***p < .001

In order to analyse whether RC mediates the relationship between HPWS and branch performance measures , a comparison of Model 4 and 2 for each measure shows that the regression coefficient of HPWS diminished significantly suggesting that RC mediated the link between HPWS and the branch growth in advances. Sobel test results also provided ($z = 5.12$, $p < 0.001$) evidence for the mediating role of relational coordination in the HPWS and growth in branch advances relationship.

Results from a comparison of Model 4 and Model 2, shown in Table 5, indicated that both HPWS and relational coordination are significantly related with profit to staff performance. However, the comparison between M4 and M2 revealed no significant reduction in the HPWS regression coefficient. Accordingly, these results suggest that the mediating role of relational coordination in HPWS and profit per staff was not convincingly supported by the data.

To establish mediation of RC with HPWS and branch growth in profit performance relationship, regression results from Model 4 were compared with Model 2 (Table 5). A comparison of two models indicated that the link between the extent of HPWS and growth in branch profit reported in Model 2 was weaker and diminished significantly. To further check mediation, the results of the Sobel test confirmed the mediating effect of relational coordination ($z = 6.85$, $p < 0.05$).

To test for mediation effects, regression results from Model 4 were compared with Model 2. A comparison of two models

revealed that the relationship between the extent of HPWS and growth in branch profit reported in Model 2 was weaker and diminished significantly. To further check mediation, the results of the Sobel test confirmed the mediating effect of relational coordination ($z = 6.85$, $p < 0.05$). These results provided support for the assertion that relational coordination mediates the relationship between the extent of HPWS and growth in profit. Overall, these findings suggested that relational coordination mediated the relationships between the extent of HPWS and branch performance measures including growth in the level of branch deposits, growth in advances, advances to deposits, and growth in profit.

Table 5. Results of Analysis Testing Mediation of Relational Coordination

	RC	Advances to Deposits			Profit to Staff			Growth in Profit		
Variables	M1 (XM)	M2 (XY)	M3 (MY)	M4 (XMY)	M2 (XY)	M3 (MY)	M4 (XMY)	M2 (XY)	M3 (MY)	M4 (XMY)
Age	-0.03	.03	.04	.03	-.44	-.52	-.46	17.96	16.50	18.80
Qualification	-0.03	.06	.07	.06	-.21	-.28	-.23	7.07	5.89	7.87
Experience	0.01	-.03	-.05	-.03	.32	.40	.33	2.52	4.97	2.14
Gender	0.05*	.02	.03	.01	-.40*	-.44*	-.36*	-2.18	-6.59	-3.65
Function	-0.02	.04	.03	.04	.05	.09	.04	4.89	7.50	5.37
Length of service	0.03	-.06	-.06	-.06	.38*	.41*	.40*	2.22	1.74	1.25
HPWS	0.45***	-.30***	--	-.38***	1.13***	--	1.50***	74.20**	--	60.27**
RC	--	--	.04	.19**	--	-.23	-.82**	--	54.83**	31.24*
R	0.43	.17	.08	.19	.20	.14	.22	.18	.15	.19
R^2	0.18	.03	.01	.04	.04	.02	.05	.03	.02	.04
Adjusted R^2	.177	.02	.004	.027	.031	.011	.040	.025	.015	.029
ΔR^2	0.17	.02	.00	.03	.02	.01	.03	.03	.02	.03
F	28.25**	3.57***	.85	4.06***	5.05***	2.43*	5.62***	4.30***	2.90**	4.30***
ΔF	185.7**	19.31**	.36	13.36**	18.88**	.87	14.17**	25.27**	15.55**	14.80**
Sobel test	--	--	--	0.03**	--	--	0.12**	--	--	6.85*

Note. X = HPWS, Y = Advances to deposits, Profit to staff, Growth in profit. M = Relational Coordination (RC), *P < .05; **p < .01; ***p < .001

Discussion

HPWS and Branch Level Performance: This research analyzed essential relationships which signify the promising role of the HPWS, the extent to which HPWS predict the degree of relational coordination

among employees at various functional levels, and its impact on organizational performance in service settings. Prior studies have considered several HR outcomes as intervening variables in examining the relationship between HRM and performance (e.g. Katou &Budhwar, 2006; Snape & Redman, 2010). This study adds to these previous studies by featuring that the degree of relational coordination among employees act as an intermediate mechanism in HPWS and performance relationship. The results of this study showed a range of linkages between the extent of HPWS, relational coordination and performance outcomes at branch level. In this research, the extent of HPWS has shown positive and significant effects on firm performance. Findings from this research are consistent with the theoretical proposition in HRM research that firms with an appropriate set of HR practices in HPWS have a higher level of firm performance (Arthur, 1994; Huselid, 1995; Delery& Doty, 1996; Boxall &Macky, 2009).

Relational Coordination and Branch Performance: This study assumes that the degree of relational coordination among employees is expected to improve the complete process of service delivery in providing various financial services to their customers at the branch level. The findings illustrate strong evidence of a relationship between the degree of relational coordination and branch level performance outcomes. In total, four out of six performance outcomes for branch performance within the theoretical framework were predicted by the extent of relational coordination among employees. As shown in Table 5, the degree of relational coordination among employees indicated significant and positive associations with the branch level performance measures. Most importantly, the results of this provides validation from the perspectives of the financial sector in a developing country. The empirical findings suggest that relational coordination predicts a broad range of financial outcomes that are of high importance to bank performance. The findings of the current study are consistent with those of Gittell (2000) who found that improved quality of patient care and patients' length of stay in the hospital were significantly related to the higher levels of relational coordination among care providers in hospitals.

Relational Coordination Linking HPWS and Performance:

The main question in this research was to examine the role of relational coordination among employees as an intervening mechanism in explaining the linkages between high performance work system and organizational performance. Following the three-step method of mediation analysis recommended by Baron& Kenny (1986) and Sobel's test, results showed that relational coordination partially mediated the relationship between HPWS and performance. The findings in this study are in agreement with the findings of Gittell et al. (2010) which showed

that high performance work practices are positively linked with relational coordination among employees. Overall, the present study was designed to determine the effects of HPWS on organizational performance through examining the role of the degree of relational coordination among employees working in service sector settings characterized by interdependence, uncertainty, and time constraints. The findings observed in this study are consistent with those of other studies and therefore, empirically validates the direct relationship between the extent of HPWS and organizational performance. These findings are imperative for developing an understanding about how the extent of HPWS influences organizational performance through the mediation of relational coordination among employees, and also highlighting the significance of incorporating the employees' perspective into the HPWS and performance relationship.

Conclusion

This present study was designed to determine the effects of HPWS on organizational performance in the banking sector of Pakistan. This study focuses on the essential process and the theoretical description underpinning HPWS and performance relationships and therefore has taken up the theory of relational coordination to examine the process through which HPWS influence organizational performance.The results of this study showed that the extent of HPWS predicted high level of relational coordination among employees at various levels.The findings also suggested that the degree of relational coordination was significantly associated to branch performance in terms of advances, deposits and overall profitability. The most important finding emerged from this research was that relational coordination among employees partially mediated the relationship between HPWS and organizational performance. This research contributes to the current understating of the linkages between HPWS and organizational performance in a service context. This study has made far-reaching implications for managers, bank management and HR professionals by providing insights into the process underlying the HPWS and performance relationships.

Policy Implications

An important feature of this study is the service sector context. The importance of HRM in service context may be higher than in manufacturing due to the nature of services, for example the production and consumption of services at the same time, and thus the greater involvement of customers in the production of service (Bowen & Schneider, 1988).

The finding of this study provides significant implications for managers and top management of the organizations whose focus is likely to be on achieving business goals and economic performance. Managing employees is an important element of a manager's responsibilities in

every organization. Managers may accomplish several advantages from being trained in the essential competencies to implement an effective HPWS and providing an environment that promotes relational coordination among employees. In this regard, the HRM department has a key role in the selection and promotion criteria for managerial positions. The findings of this study suggest that when top management provides a coordinated approach and the HR function is entrusted to work with managers to establish the social context for productive HRM (Ferris et al., 1999), they are expected to achieve better performance results. In order to accomplish these outcomes, strong leadership is required from top management to ensure that the HR function, managers, and other support functions are coordinated and equipped with the necessary resources to implement HPWS effectively to support the development of relational coordination among employees.

Directions for Future Research

In general, there is plenty of scope for further advancement in research with regard to the theory of how HPWS affect performance outcomes. An essential issue for further research is not only to test the relationships between the HPWS and performance, but also to examine more aspects of HPWS (Guest et al., 2003) as well as different types of performance outcomes. Future studies should focus on testing of the theory with regard to the process of HPWS, its mediations its effect on organizational performance. This is vital not only to enhance theoretical understanding, but also to help employees to devise better understanding of improving performance by proper usage of HPWS. In this regard, future studies are needed to provide more understanding of the mechanisms that link HPWS and performance.

References

Adler, P., Kwon, S. &Heckscher, C. (2008). The emergence of collaborative community.*Organization Science,* 19(2), 359–376.

Appelbaum, E., Bailey, T., Berg, P. &Kalleberg, A. L. (2000). *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*. Washington. D. C.: Economic Policy Institute.

Arthur, J. B. (1994). Effects of human resource systems on manufacturing performance and turnover.*Academy of Management Journal,* 37(3), 670-687.

Baron, R. M. & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations.*Journal of Personality and Social Psychology*, 51, 1173-1182.

Bechky, B. A. (2006). Gaffer, gofers, and grips: Role-based coordination in temporary organizations.*Organization Science,* 17(1), 3–21.

Becker, B. & Gerhart, B. (1996). The impact of human resource management on organizational performance. Academy *of Management Journal*,39(4), 779-801.

Becker, B.E., Huselid, M.A., Pickus, P.S. & Spratt, M.F. (1997). HR as a source of shareholder value: Research and recommendations.*Human Resource Management,* 36(1), 39–47.

Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein and S. W. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations* (349-381). San Francisco: Jossey-Bass.

Boselie, P., Dietz, G. & Boon, C. (2005). Commonalities and contradictions in HRM and performance research.*Human Resource Management Journal,* 15(3), 67–94.

Bowen, D. E. &Ostroff, C. (2004). Understanding HRM-firm performance linkages: The role of the strength of the HRM system.*Academy of Management Review,* 29(2), 203-212.

Bowen, D.E. & Schneider, B. (1988). Services Marketing and Management: Implications for Organizational Behaviour. In Barry Staw and Lawrence Cummings, eds., *Research in Organizational Behaviour,* 10, 43–80.

Boxall, P. &Macky, K. (2009). Research and theory on high-performance work systems: progressing the high-involvement stream. *Human Resource Management Journal*, 19(1), 1-21.

Combs, J., Yongmei, L., Hall, A. &Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance.*Personnel Psychology,* 59(3), 501-528.

Crowston, K. &Kammerer, E. (1998). Coordination and collective mind in software requirements development.*IBM Systems Journal,* 37(2), 227–245.

Datta, D.K., Guthrie, J.P. & Wright, P.M. (2005). Human resource management and labour productivity: Does industry matter?.*Academy of Management Journal,* 48(1), 135–145.

Delery, J. E. & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions.*Academy of Management Journal,* 39(4), 802-835.

Faraj, S. &Sproull, L. (2000). Coordinating expertise in software development teams.*Management Science,* 46, 1554–1568.

Faraj, S. & Xiao, Y. (2006). Coordination in fast response organizations.*Management Science,* 52(8), 1155–1169.

Ferris, G.R., Hochwarter, W.A., Buckley, M.R., Harrell-Cook. G. & Frink DD. (1999). Human resource management: Some new directions.*Journal of Management,* 25, 385–415.

Galbraith, J.R. (1977). *Organization Design*, Reading. MA: Addison-Wesley.

Gant, J., Ichniowski, C. & Shaw, K. (2002). Social capital and organizational change in high-involvement and traditional work organizations.*Journal of Economics and Management Strategy,* 11, 289–328.

Gittell, H. J., Seidner, R. & Wimbush, J. (2010). A relational model of how high performance work systems work.*Organization Science,* 21(2), 490-506.

Gittell, J. H. (2000). Organizing work to support relational coordination.*International Journal of Human Resource Management,* 11, 517–539.

Gittell, J. H. (2001). Supervisory span, relational coordination and flight departure performance: A reassessment of post bureaucracy theory.*Organization Science*, 12(4), 468-483.

Gong, Y., Law, K.S., Chang, S. & Xin, K.R. (2009). Human resource management and firm performance: The differential role of managerial affective and continuance commitment.*Journal of Applied Psychology*, 94(1), 263–275.

Guest, D. (1997). Human resource management and performance: A review and research agenda.*International Journal of Human Resource Management*, 8(3), 263-76.

Guest, D., Michie, J., Conway, N. & Sheehan, M. (2003). Human resource management and corporate performance in the UK.*British Journal of Industrial Relations*, 41(2), 291-314.

Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance.*Academy of Management Journal*, 38(3), 635-672.

James, L. R., Demaree, R. G. & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias.*Journal of Applied Psychology*, 69, 85-98.

James, L. R., Demaree, R. G. & Wolf, G. (1993). rWG: An assessment of within-group interrater agreement.*Journal of Applied Psychology*, 78, 306-309.

Katou, A. A. &Budhwar, P. S. (2009). Causal relationship between HRM policies and organisational performance: Evidence from the Greek manufacturing sector.*European Management Journal, 28*(1), 25-39.

Lance, C. E., Butts, M. M. &Michels, L. C. (2006). The sources of four commonly reported cutoff criteria: What did they really say?.*Organizational Research Methods*, 9(2), 202-220.

Leana, C. R. & Van Buren, H.J. (1999). Organizational social capital and employment practices.*Academy of Management Review*, 24, 538–555.

LeBreton, J. M., Burgess, J.R.D., Kaiser, R. B., Atchley, E.K.P. & James, L. R. (2003). The restriction of variance hypothesis and interrater reliability and agreement: Are ratings from multiple sources really dissimilar?.*Organizational Research Methods*, 6(1), 80-128.

LeBreton, M. J. &Senter, L. J. (2008). Answers to 20 questions about interrater reliability and interrater agreement.*Organizational Research Methods*, 11, 815-835.

Lepak, D. P. (2007). Strategic human resource management: A look to the future. In Schuler R.S. & Jackson S.E. (Ed.), *Strategic Human Resource Management*: 457- 465, Malden MA: Blackwell Publishers.

Liao, H., Toya, K., Lepak, D. P. & Hong, Y. (2009). Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on service quality.*Journal of Applied Psychology*, 94(2), 371-391.

Malone, T. &Crowston, K. (1994). The interdisciplinary study of coordination.*Computer Surveys*, 26(1), 87–119.

Ostroff, C. & Bowen, D.E. (2000). Moving HR to a higher level: HR practices and organizational effectiveness.' In Klein KJ, Kozlowski SWJ (eds). *Multilevel Theory, Research, and Methods in Organizations:*

Foundations, Extensions, and New Directions. San Francisco. CA: Jossey-Bass; 211–67.

Paradi, J.C., Yang, Z. & Zhu, H. (2011). Assessing Bank and Bank Branch Performance Modelling Considerations and Approaches *in Handbook on Data Envelopment Analysis International Series in Operations Research and Management Science*, 164, 315-361.

Rungtusanatham, M. J., Choi, T. Y., Hollingworth, D. G., Wu, Z. & Forza, C. (2003). Survey research in operations management: Historical analyses.*Journal of Operations Management*, 21(4), 475-488.

Snape, E. & Redman, T. (2010). HRM practices, organizational citizenship behavior and performance: A multi-level analysis. *Journal of Management Studies*,47, 1219-1247.

Snell, S.A., Youndt, M.A. & Wright, P.M. (1996). Establishing a framework for research in strategic human resource management. Merging resource theory and organizational learning. In G.Ferris (Ed.) *Research in Personnel and Human Resource Management*, 14, 61-90.

Sobel, M., E. (1982). Asymptotic confidence interval for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological Methodology* (290-312). Washington DC: American Sociological Association.

State Bank of Pakistan (2012). *Banking Statistics of Pakistan.* Karachi: SBP press.

Tushman, M. & Nadler, D. (1978). Information processing as an integrating concept in organizational design. *Academy of Management Review*, 3(3), 613-24.

Wall, T. & Wood, S. (2005). The romance of human resource management and business performance, and the case for big science. *Human Relations*, 58(4), 429-462.

Wright, P.M., Dunford, B.B. & Snell, S.A. (2001). Human resources and the resource-based view of the firm. *Journal of Management*, 27(6), 701–721.

Wright, P.M., Gardner, T.M., Moynihan, L.M. & Allen, M.R. (2005). The relationship between HR practices and firm performance: Examining causal order. *Personnel Psychology*, 58(2), 409–446.

Zacharatos, A., Barling, J. & Iverson, R. D. (2005). High-performance work systems and occupational safety. *Journal of Applied Psychology*, 90(1), 77-93.