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## RESEARCH PAPER

## Exploring the Relationship between High-Performance Work Systems, Employee Commitment, and Firm Performance (A Multi Mediation Model)

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PAPER INFO	ABSTRACT
Received:	The study explored the effects of High-Performance Work
February 14, 2022	System practices (HPWS - AMO model) on the employee and
Accepted:	organizational performance and mediating role of employee
April 23, 2022	commitments between these two. Hypotheses were tested with a
Online:	sample of 205 employee-supervisor dyads working in public
April 25, 2022	sector banks and insurance companies of Sargodha and Lahore.
Keywords:	The proposed direct and indirect relationships among study
Commitment,	
Employee	variables were tested using structural equation modeling (SEM).
Performance,	Results showed that ability and opportunity enhancing HPWS
High-Performance Work Systems,	practices had a positive effect on the employee and
Organization	organizational performance. Affective, continuance and
Subjective	occupational commitment are partially mediated between ability
Performance	and opportunity enhancing HPWS practices and performance. In
*Corresponding	contrast, normative commitment did not show meditation on the
Author	relationship between HPWS practices and employee
	performance; however, it partially mediated the link between
	ability and motivation, enhancing HPWS practices and
naveed.mushtaq@	subjective organizational performance. This study suggests that
uos.edu.pk	developing a system of HPWS practices in the organizations will
	not only help the organizations to flourish and stay competitive
	but will also help in eliciting the right employee attitudes by
	enhancing employee commitment.

## Introduction

Over the past few years, the field of SHRM has paid attention to two essential research domains. First, how HRM practices help organizations to achieve their performance goals and second, which processes improve HRM-Performance link (Haar et al, 2021). Empirical studies conducted by several researchers (Arthur, 1994; Huselid, 1995; MacDuffie, 1995; Obeidat *et al.*, 2016; Wright *et al.*, 2005) tried to explore the link between HRM practices such as HPWS and organization performance. Though, an appealing topic in SHRM that has received less empirical consideration is the process of the mechanism involved in the relationship between HRM practices and performance (Wright *et al.*, 2005). Although different researchers in their

studies showed that there is a positive relationship between HPWS and the firm's performance (Manresa et al, 2021). However, there are some essential theoretical and methodological issues that have been ignored (Boxall *et al.*, 2011; Paauwe, 2009).

First, implementing HPWS not only generates high-performance levels (Kornau *et al.*, 2020) but is also subject to creating stressors (Giannikis *et al.*, 2019) that could negatively affect performance (Kloutsiniotis et al, 2021). The critical role played by different commitments (affective, normative, continuance, and occupational commitment) in this relationship to improve performance needs to be further investigated (Khan et al, 2021). Social exchange theory recommends that if employees are treated fairly in the organization, they will respond through positive behaviors (Aryee *et al.*, 2002) because of which performance will enhance. In the social exchange process, high-performance work systems are essential input (Snape & Redman, 2010). Several scholars described that these practices helped the employees to shape their perceptions, behaviors, and attitudes (Kuvaas, 2008) thus proving the hat organization wants to develop a social exchange relationship with employees (Snape & Redman, 2010). Hence, this study will address the effects of HPWS on employee and organizational performance through the mediating impact of different commitments.

Second, researchers disagree about which HR practices should make up HPWS (Boxall & Purcell, 2011). Therefore, nowadays, ability-motivation-opportunity (AMO) model of HRM has been used by researchers and is expected to improve employee performance (Yong et al., 2019), and ultimately organizational performance (Bayo-Moriones & Bello-Pindado, 2021) by affecting employees' ability, motivation, and opportunity to perform (Macky & Boxall, 2007). According to AMO theory, the performance organization depends on employee's ability, motivation, and opportunity through which an employee can do their job such as employees have the skills and knowledge needed to do the target job is called (abilities); 2) they have incentivized and an interesting job that is considered (motivation); lastly 3) work environment of the organization provides support and ways of expression is called (opportunity) (Boxall et al., 2007). The theory was introduced by Appelbaum el. (2000) in which they stated the relationship between high-performance work systems and employee outcomes related to behavior within organizations. Theory predicts the factors that can enhance the performance of employees through improving the ability of employee (A), motivation (M), and opportunity (O) to perform (Boxall et al., 2007). Only a few studies have explored the AMO-Performance link through the mediating role of different commitments. Hence, this study will add to the body of research within the HRM field by investigating the relationship AMO model types employee between the use of of commitment (affective, continuance, normative and occupational commitment) and employee and organizational performance.

Third, most of the research exploring the relationship between the HPWS-Performance link has been conducted in manufacturing firms ignoring the service sector (Sun *et al.*, 2007), regardless of the reality that the service sector is the leading provider of GDP in an economy. Many researchers (Arthur, 1994; Datta *et al.*, 2005; Guest *et al.*, 2003) agreed that this relationship should be examined in labor-intensive service industries. The link between HPWS and organizational performance has been mainly studied in private segments of the organizations. There has been minimal research conducted that addresses this relationship in other

organizational contexts, particularly in public organizations. By adopting best management practices, for instance, HPWS, there would be an improvement in productivity and the performance of public service organizations (Eyamu et al, 2021). Therefore, there is a great need to explore this relationship in Pakistani public sector service organizations where working conditions are full of stressors and achieving desired performance levels is an issue that needs the special attention of the academicians and researchers. Thus, the main aim of this study is to investigate the relationship between High-Performance Work System (HPWS) practices with the employee and subjective organizational performance through the mediating role of employee commitment.

#### Literature Review

From the last two decades, human resource management has gained significant attention (Redman & Wilkinson, 2009). Despite this, there is no precise definition of HRM (Noon & Heery, 2008; Paauwe, 2009; Storey, 2001). However, the definition of Storey (1995) is widely used. He states that it is "a distinctive approach to employment management which seeks to achieve competitive advantage through the strategic deployment of a highly committed and capable workforce, using an integrated array of cultural, structural and personnel techniques."

Focusing on organization and employee both, Whitener (2001) described that a high-performance work system is the system that is developed to enhance the effectiveness of the organization by creating situations that assist employees in working hard and getting involved in an organization for achieving its goals. Likewise, Iverson and Zatzick (2007) stated HPWS as the HR practices that motivated employees to match their goals with the organization and apply their efforts to achieve them. Noon and Heery (2008) explained the high-performance work system as HR practices that are developed to improve the performance of an organization by employee commitment. The above definitions of a high-performance work system (HPWS) stated that HR practices are used to enhance the effectiveness and performance of the organization through developing employee's skills and their organizational commitment (Dorta-Afonso, 2021).

The study of Storey (1995) differentiates the versions of human resource management as "soft" and "hard." According to Whitener (2001) hard version of HRM is a control approach that viewed employees as object or resource which can be used dispassionately along with rational formal way (Storey, 1995). It linked HR practices and employee utilization with a business strategy of the organization (Guest, 2002; Guest, 1999). This approach comprised rewards, rules, monitoring, and sanctions to direct the behavior of the employee (Whitener, 2001). While, on the other side, the commitment approach is the soft version of HRM (Whitener, 2001), which forced an organization to treat employees as valuable assets or individuals and emphasized on the well-being of employees (Storey, 1995). Soft HRM version is the part of the HR movement. This movement stressed the vital role of employee commitment to fulfil the objectives of the organization. Therefore, because of this approach, employees are not considered as objects but the means (Guest, 1999). HRM soft version is related to the term "high performance" HR practices or work systems (Beardwell & Claydon, 2010; Guest, 1999).

## **High-Performance Work Systems and Performance**

The central purpose of HPWSs is that an organization can improve its performance with the help of encouraging employees to exert more effort in work and showing more commitment and taking part in the decision-making system of organization (Bauer, 2004). High-performance work systems are implemented at the workplace where employees felt the mutual partnership between themselves and the employer. Moreover, employees showed the feelings of obligation, satisfaction, and attachment with the organization, and these feelings changed into work behavior like job performance. Employee performance is one outcome of this study, and they define it as task proficiency or in-role performance. The activities that are part of formal role requirements are called in-role job performance of an employee (Randall et al., 1999). Williams and Anderson (1991) showed that in-role performance is a work behavior that d with formal responsibilities and duties, which is described in the employment contract. From an organizational perspective, they prove that HPWSs enhanced organizational performance (Becker & Gerhart, 1996; Huselid, 1995). From the individual perspective, it is not still clear how the set of HR practices affects performance (Ferris et al., 1999; Guest, 1997; Wright & Boswell, 2002). Researchers claimed that HR practices such as incentive pay, selection, employee involvement, and training programs enhanced abilities, skills, and knowledge of employees that increased the motivation, which leads to the performance of employees (Huselid, 1995). Hence, task performance depends on motivation and ability level of employee (Dyer & Reeves, 1995). So, we proposed hypothesis as,

- **H1a**. Ability-enhancing HPWS practice has a positive and significant relationship with employee performance.
- **H1b.** Motivation-enhancing HPWS practice has a positive and significant relationship with employee performance.
- **H1c**. Opportunity-enhancing HPWS practice has a positive and significant relationship with employee performance.

Non-financial or subjective performance is measured by market performance and perceived organizational performance, and these measures become the evaluation source of subjective performance. Organizational subjective performance is the base of self-report variables (Delaney & Huselid, 1996; Singh, 2004). It has included aspects such as sales growth, product quality, market share, customer satisfaction, perceived profitability, product development, the relation among employees and management, retention ability of employees and marketing of products and services. Several studies of past highlighted the association among human resources management practices and organization performance (Boselie *et al.*, 2005; Collins & Smith, 2006; Hailey *et al.*, 2005).

Arthur (1994) researched 30 steel "minimills." He concluded that HR systems that are commitment based showed a high level of productivity as compared to control systems such as promoting the resource production efforts of the employee rather than efficiency and lower labor cost. Delery and Doty (1996) highlighted the three different aspects of high-performance approaches regarding human resource management. From a universalistic perspective, they describe it that HRM practices are better as compared to others because these HRM practices have an association with organizational performance. From a contingency perspective, it is recommended that HRM practices should be consistent with other aspects of an organization. Last, the configuration perspective described that HRM practices have

ways of practices that are externally congruent and internally consistent with other characteristics of the organization. These aspects are not considered in conflict, and they may function in various levels of organization (Becker & Gerhart, 1996). The present study focused on the universalistic perspective. Anyhow, best practices increased the value of the firm, and firms can add extra benefits by promoting external congruent and internally consistent practices (Becker & Gerhart, 1996). The study of Obeidat et al. (2016) also described that High-performance work systems are positively related to the performance of the organization. Thus, the investment of an organization in human resource practices helped to develop, maintain, and gain a qualified workforce for generating financial gains. They also showed that the dimensions of AMO theory and HPHRP assist in financial gain and in improving the benefits of the company. Especially training practices, compensation, formal staffing, and performance appraisal are linked with organizational performance. Therefore, the universalistic perspective explained that high-performance work systems or HRM practices would have a positive relationship with organization subjective performance. So, we proposed hypotheses as,

- **H2a**. Ability-enhancing HPWS practice has a positive and significant relationship with organizational subjective performance.
- **H2b.** Motivation-enhancing HPWS practice has a positive and significant relationship with organizational subjective performance.
- **H2c.** Opportunity-enhancing HPWS practice has a positive and significant relationship with organizational subjective performance.

#### Mediation

Past studies described the effects of normative and affective commitment on performance. Normative and affective commitment has a positive relationship with job performance, but normative commitment is not as much linked with job performance (Meyer & Allen, 1991). The results described that normative commitment is negative, or positively or non-linked with the performance of employees (Allen & Meyer, 1996). Affective commitment is said to be the most essential aspect of organizational commitment because of its significant effects on the behaviors of organizations (Riketta, 2002). These behaviors included job performance (Mathieu & Zajac, 1990; Meyer & Allen, 1997; Mowday et al., 2013; Randall, 1990; Randall et al., 1999). It explained that employees who are attached to their jobs are more willing to exert extra effort in his or her work. Past empirical studies showed the moderation among affective commitment and job performance (Allen & Meyer, 1996; Cohen, 1991; Mowday et al., 2013; Organ & Ryan, 1995; Randall, 1990) and a metaanalysis by Mathieu and Zajac (1990) highlighted the association between affective commitment and job performance. The research of Meyer et al. (2002) explained that normative commitment is less related to job performance as compared to affective commitment.

Earlier researches (Konovsky & Cropanzano, 1991; Meyer et al., 1989) found the negative association among continuance commitment and performance. Few explanations regarding continuance commitment relationship that employees think they have no other option except to stay with this organization. This thought affects the performance of them (Meyer & Allen, 1997). Anyhow, a few types of research showed that there is no association between continuance commitment and

in-role performance (Hackett *et al.*, 1994; Mayer & Schoorman, 1992; Somers & Birnbaum, 1998). The present study proposes that these two variables are connected because employees who sustain relationships with the organization but are not willing to do still showed excellent performance because of fear of being fired. One more reason is that they want positive references for his or her next job. Therefore, based on these arguments, we proposed hypotheses as:

- **H3a.** Employee commitment mediates the relationship between ability-enhancing HPWS practice and employee performance.
- **H3b.** Employee commitment mediates the relationship between motivation-enhancing HPWS practice and employee performance.
- **H3c.** Employee commitment mediates the relationship between opportunity-enhancing HPWS practice and employee performance.

Based on the above literature review, we can postulate that occupational commitment and three dimensions of organizational commitment, namely affective, continuance, and normative, mediate the relationship between high-performance works systems (ability-enhancing, motivation-enhancing, and opportunity-enhancing HPWS practices) and organizational subjective performance. Therefore, we proposed the following hypotheses:

- **H4a.** Employee commitment mediates the relationship between ability-enhancing HPWS practice and organizational subjective performance.
- **H4b.** Employee commitment mediates the relationship between motivation-enhancing HPWS practice and organizational subjective performance.
- **H4c.** Employee commitment mediates the relationship between opportunity-enhancing HPWS practice and organizational subjective performance.

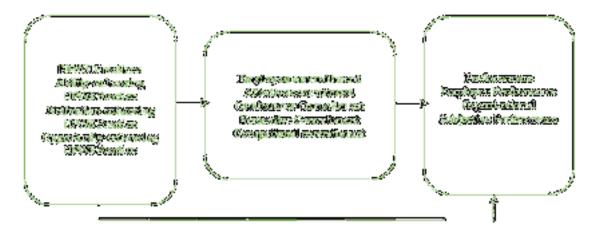


Figure 1 Conceptual Model

#### Material and Methods

Public sector financial institutions of Pakistan were selected for the present study as there exists a fierce competition among different organizations in this industry, and the nature of tasks performed by employees is more innovative, highly ambiguous and extremely complex. Data was collected from two sources of public sector banks and insurance companies of Lahore and Sargodha: employees and their supervisors. The unit of analysis was the individual level.

Data were collected from 205 employees and 48 supervisors, and hence 205 employee-supervisor dyads were made. The present study was conducted on quantitative methods, and survey technique was introduced. Cross-sectional data were collected, and the questionnaire was a pencil and a paper-based instrument. There was a separate questionnaire for employees and supervisors to avoid common method biases. Employees rated the HPWS practices, employee commitment, and organizational subjective performance, and the supervisors rated employee performance.

The data was collected over two months. The employee questionnaire included 61 questions, and the supervisor questionnaire included 7 items. The language used for the questionnaire was English. Demographics were included. The responses received were entered into statistical software after coding.

#### **Instruments**

To measure HPWS, a 20-item scale was used involving three different HPWS practices. 15 items of the scale were adopted from Bae and Lawler (2000) and 5 items from Kang (2015). A 24-item scale of Meyer and Allen (1991) was adopted for the measurement of affective, continuance, and normative commitment and for measuring occupational commitment; a 7-item scale of Blau (1989) career commitment was adopted. A 10-item scale by Delaney and Huselid (1996) was chosen to measure organizational performance. It compared the past three years' performance of the organization to the performance of its competitors in the same industry. A 7-item scale of in-role performance by Williams and Anderson (1991) was selected to measure employee performance.

#### **Control Variables**

Control variables chosen for the study were: gender, age, qualification, and experience. Gender was the nominal variable. It had two categories: male and female. Age, qualification, and experience were categorical variables.

#### **Data Analysis**

Keeping in view the nature of the study, context, and size of the research model, the measurement and structural model of the current study were assessed by using partial least squares structural equation modeling (WarpPLS 5).

## Sample Response Rate

The questionnaires were distributed to both males and females' employees and supervisors. Respondents consisted of 155 males employees (75.6%), 50 females employees (24.4%), 42 male supervisors (87.5%), and 6 female supervisors (12.5%). Out of 350 questionnaires sent, 269 employee questionnaires and 205 complete sets of employee-supervisor dyads were received. The response rate was 76.8% and 58.6%, respectively.

### **Measurement Model**

To check for validity and reliability of latent variables, the measurement model was assessed. Confirmatory factor analysis was run by using principal components to extract factors. CFA was performed to confirm for discriminant and convergent validity.

The table of loadings and cross-loading was used for describing the convergent validity of the measurement instrument. All of the standardized factor loadings for this study were significant at p=0.001 level. These results, as shown in Table 1, suggest the convergent validity of the instrument used in the study (Hair, 2010). The items that were retained had the factor loadings between 0.860 and 0.589.

Table 2 given below, shows that for all the latent variables, CR and CA were above the threshold stated except for Cronbach's alpha for the normative commitment that was 0.58. Table 3 shows that the values of AVE for all the variables of the given model are above 0.5; hence convergent validity exists for the scales used in the study. Table 4 shows that for the given model, values of full collinearity VIF for all the latent variables are below 3.3, proving that there is no multicollinearity and common method bias in the model. A suggested threshold for Q-squared coefficients is that it should be greater than 0. For the given model, table 5 shows that the values are in an acceptable range. Hence it proved that the model has predictive validity.

Table 1 Combined loadings and cross-loadings

Items	HP_A	HP_M	HP_O	AC	CC	NC	OC	OSP	EP
Hp_ab1	0.786	-0.278	-0.002	-0.091	-0.139	0.023	-0.113	0.162	0.002
Hp_ab2	0.825	-0.007	0.156	-0.013	-0.030	-0.093	0.067	0.119	-0.032
Hp_ab3	0.718	-0.126	-0.065	-0.267	0.089	0.124	-0.174	-0.006	-0.076
Hp_ab5	0.652	0.260	-0.139	0.112	0.094	-0.119	0.134	-0.221	0.033
Hp_ab7	0.652	0.223	0.016	0.309	0.014	0.073	0.107	-0.118	0.089
Hp_m9	-0.131	0.635	0.146	-0.106	-0.003	0.015	0.223	-0.065	-0.002
Hp_m10	0.188	0.651	-0.207	0.052	-0.037	-0.075	0.057	-0.157	0.019
Hp_m11	0.113	0.776	-0.062	0.009	0.016	-0.060	-0.130	0.115	0.009
Hp_m12	-0.153	0.829	0.109	0.032	0.016	0.104	-0.094	0.066	-0.022
Hp_op17	0.031	-0.018	0.589	0.027	0.107	-0.081	0.142	-0.045	0.243
Hp_op19	0.063	0.047	0.809	-0.003	-0.056	0.069	-0.091	0.126	-0.143
Hp_op20	-0.080	-0.032	0.858	-0.016	-0.021	-0.010	-0.012	-0.088	-0.032
AC_1	0.233	-0.000	0.031	0.733	0.022	-0.049	0.323	0.007	-0.015
AC_2	-0.029	-0.029	-0.057	0.719	0.113	0.154	0.034	0.118	-0.068
AC_3	-0.070	0.008	0.237	0.713	0.094	-0.003	0.062	0.150	-0.089
AC_5	-0.124	0.079	-0.064	0.650	-0.201	-0.191	-0.161	-0.139	0.113
AC_6	-0.028	-0.051	-0.151	0.720	-0.047	0.071	-0.279	-0.148	0.069
CC_2	-0.158	0.087	0.053	0.110	0.724	0.068	-0.004	0.022	0.076
CC_3	-0.057	0.072	-0.078	-0.002	0.794	-0.021	-0.125	0.002	-0.009
CC_5	-0.041	-0.088	0.182	-0.133	0.717	0.141	0.030	0.030	-0.086
CC_8	0.292	-0.089	-0.165	0.027	0.647	-0.205	0.124	-0.061	0.021
NC_4	-0.079	-0.094	-0.056	0.128	0.098	0.699	0.238	-0.038	-0.034
NC_6	-0.145	0.137	0.093	-0.136	0.074	0.748	-0.017	0.004	0.009
NC_7	0.222	-0.050	-0.041	0.017	-0.167	0.739	-0.208	0.032	0.022
OC_2	0.054	0.080	0.042	0.090	-0.061	-0.192	0.768	-0.019	-0.098
OC_4	-0.108	0.010	-0.040	-0.044	0.101	0.032	0.844	-0.012	0.022
OC_5	0.056	-0.015	0.042	-0.043	-0.016	0.017	0.851	-0.003	0.064
OC_6	0.002	-0.067	-0.040	0.006	-0.030	0.124	0.860	0.032	0.003
OSP_1	0.119	-0.161	-0.090	-0.069	0.047	-0.287	0.123	0.787	-0.099

OSP_2	-0.044	-0.051	-0.002	0.104	-0.029	-0.140	-0.022	0.765	-0.059
OSP_3	-0.134	0.021	-0.087	-0.119	0.285	-0.159	0.278	0.724	-0.025
OSP_4	-0.003	0.139	-0.187	-0.070	0.006	0.220	0.017	0.671	0.124
OSP_5	-0.061	-0.064	-0.111	0.120	0.097	-0.007	0.038	0.717	0.019
OSP_6	-0.226	0.186	-0.046	0.008	0.032	0.016	-0.032	0.743	0.040
OSP_7	0.133	-0.112	0.062	-0.003	-0.004	0.137	-0.253	0.797	0.020
OSP_8	0.213	-0.147	0.065	0.065	-0.126	0.061	-0.171	0.772	-0.051
OSP_9	-0.116	0.188	0.112	0.072	-0.032	0.067	0.057	0.688	0.067
OSP_10	0.079	0.051	0.262	-0.107	-0.261	0.121	-0.000	0.754	-0.012
EP_1	0.057	0.108	-0.062	-0.066	-0.014	0.203	0.041	-0.073	0.732
EP_2	0.037	-0.021	-0.086	0.028	0.085	0.106	-0.022	-0.147	0.793
EP_3	-0.063	-0.095	0.058	-0.041	0.010	-0.201	-0.013	0.230	0.756
EP_4	-0.171	0.100	-0.050	-0.109	0.134	-0.043	-0.029	0.217	0.775
EP_6	0.173	-0.109	0.173	0.226	-0.267	-0.074	0.031	-0.274	0.629
Note: All of	f the stand	lardized fa	ctor loadii	ios are sio	nificant a	t p = 0.001	level.		

Table 2 **Reliability of Scales** 

Items	HP_A	HP_M	HP_O	AC	CC	NC	OC	OSP	EP
CR	0.850	0.816	0.801	0.833	0.813	0.773	0.900	0.925	0.857
CA	0.778	0.698	0.625	0.750	0.692	0.558	0.851	0.909	0.790

Table 3 Validity of Scales

Items	HP_A	HP_M	HP_O	AC	CC	NC	OC	OSP	EP
Average									
Variance	0.533	0.529	0.579	0.501	0.522	0.531	0.692	0.552	0.546
<b>Extracted</b>									

Table 4 Full collinearity VIF

Items	HP_A	HP_M	HP_O	AC	CC	NC	OC	OSP	EP
Variance									
Inflation	1.758	1.465	1.608	1.906	1.439	1.352	1.997	2.250	1.310
Factor									

Table 5 **Predictive Validity** 

Items	HP_A	HP_M	HP_O	AC	CC	NC	OC	OSP	EP
Q-squared coefficients				0.360	0.239	0.180	0.311	0.573	0.279

## Fornell & Larcker Criteria for Discriminant Validity

Fornell and Larcker (1981) suggested the following criteria for assessing discriminant validity. For each latent variable, the square root of AVE should be higher than any of the correlations relating to that latent variable. The values for AVEs are shown on the diagonal of the table. Any value to their right or left, in the same row should be lower than the diagonal value. By looking at table 6, it is concluded that the given model has acceptable discriminant validity.

Table 6
Fornell & Larcker Criteria for Discriminant Validity

-	Former & Larcker Citteria for Discriminant Validity										
<b>Items</b>	$HP_{-}$	$HP_{-}$	$HP_{-}$	$\mathbf{AC}$	CC	NC	OC	OSP	EP		
	$\mathbf{A}$	$\mathbf{M}$	O								
HP_A	0.730	0.514	0.406	0.363	0.387	0.332	0.360	0.514	0.205		
HP_	0.514	0.727	0.227	0.195	0.239	0.279	0.199	0.414	0.084		
$\mathbf{M}$											
HP_O	0.406	0.227	0.761	0.509	0.355	0.232	0.387	0.507	0.329		
AC	0.363	0.195	0.509	0.708	0.361	0.253	0.593	0.555	0.278		
CC	0.387	0.239	0.355	0.361	0.722	0.324	0.465	0.345	0.189		
NC	0.332	0.279	0.232	0.253	0.324	0.729	0.365	0.334	-0.063		
OC	0.360	0.199	0.387	0.593	0.465	0.365	0.832	0.554	0.263		
OSP	0.514	0.414	0.507	0.555	0.345	0.334	0.554	0.743	0.392		
EP	0.205	0.084	0.329	0.278	0.189	-0.063	0.263	0.392	0.739		
Note: S	quare ro	ots of av	erage va	riances e	extracted	l (AVEs)	are shou	vn on die	agonal.		

#### Structural Model

Based on the psychometric analyses, the following model was finalized for inferential statistics.

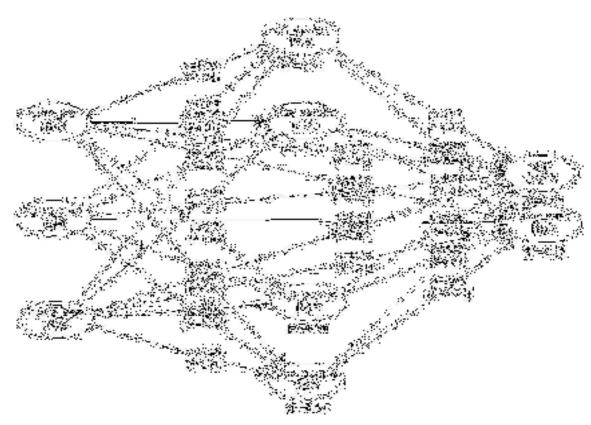


Figure 2 The research model finalized to run the inferential statistics for testing hypotheses

Figure 2 shows the results of SEM analysis. Each hypothesis shows latent variable-pair association in the model. Beta values are path coefficients which explain the strength of the relationship in the model. p-values show the significance level of  $\beta$ -values and represent whether the proposed link is statistically significant or not.

The significant p-values are .001(99.9%), .01 (99%), .05(95%) and 0.1(90%). The rest of the  $\beta$ -values are statistically insignificant. R<sup>2</sup> values show the amount of variance explained by the exogenous variables in the model.

## Model Fit and Quality Indices

WarpPLS 5 generated ten global model fit and quality indices, as shown in table 7, which shows that the given model has a good fit.

Table 7 Model Fit indices

1,10010111	1710 Well 110 11101000								
Average Path Coefficient (APC)	0.182, p=0.002								
Average R-squared (ARS)	0.331, p<0.001								
Average Adjusted R-Squared (AARS)	0.318, p<0.001								
Average block VIF (AVIF)	1.523, acceptable if <= 5, ideally <= 3.3								
Average Full Collinearity VIF (AFVIF)	1.674, acceptable if <= 5, ideally <= 3.3								
Tononhous CoE (CoE)	0.428, small >= 0.1, medium >= 0.25,								
Tenenhaus GoF (GoF)	$large \ge 0.36$								
Sympson's Paradox Ratio (SPR)	0.962, acceptable if >= 0.7, ideally = 1								
R-Squared Contribution Ratio (RSCR)	0.998, acceptable if >= 0.9, ideally = 1								
Statistical Suppression Ratio (SSR)	1.000, acceptable if >= 0.7								
Nonlinear bivariate causality direction	0.042 acceptable if >= 0.7								
ratio (NLBCDR)	0.942, acceptable if >= 0.7								

## **Results of Inferential Statistic**

The results of direct and indirect effect (mediation) are summarized below in Table 8.

## **Key findings**

The contribution of the present study to the literature is that it explored the relationship between HPWS practices (AMO model) and performance. To be more specific, based on RBV, AMO and social exchange theory, this study proposed and tested a mediation model in which four forms of employee commitment (affective, continuance, normative, occupational) mediated the relationship between HPWS practices, employee performance as well as organizational subjective performance. The results of this study clearly explain that two dimensions of HPWS practices namely ability-enhancing HPWS practice and opportunity-enhancing HPWS practice have a significant relationship with the employee as well organizational subjective performance through the mediating effect of affective, continuance and occupational commitment. The employees feel more satisfied and committed with their organization when they have been provided with skill-based training and problem-solving opportunities at the workplace.

Affective, Continuance and Occupational commitment partially mediated the link between ability and opportunity enhancing HPWS practices, and employee and organizational subjective performance. Whereas normative commitment only partially mediated the link between ability and opportunity improving HPWS practices and subjective organizational performance.

Table 8
Results of Mediation Analysis

Direct effect	Hypothes	<b>Estimate</b>	p-val	Result	Indirect ef	fect	Н	Estim	p-valı	Result	Mediation
HP_A - OSI	H2a	.244	<.001	Accepted	HP_Ab	AC - OSP	-H4a	.121	.006	Accepted	Complementary
					HP_Ab	CC - OSP	-H4a	.096	.025	Accepted	Complementary
					HP_Ab	NC - OSP	-H4a	.103	.017	Accepted	Complementary
					HP_Ab	OC - OSP	-H4a	.157	<.001	Accepted	Complementary
HP_A - EP	H1a	.146	.01	Accept	HP_Ab	AC - EP	-Н3а	.065		Accept	Complementary
			6	ed					.093	ed	
					HP_Ab	CC - EP	-Н3а	.076		Accept	Complementary
									.060.	ed	
					HP_Ab	NC - EP	-Н3а	053	.141	Rejected	Direct only effect
					HP_Ab	OC - EP	-Н3а	.088	201	Accept	Complementary
									.036	ed	
HP_M - OSI	H2b	.173	.00	Accept	HP_Mot	AC - OSP	-H4b	.030		Reject	Direct only effect
			6	ed	HP_Mot	CC - OSP	-H4b	.034	.271	ed	Direct only effect
					HP_Mot	NC - OSP	-H4b	.063	.244	Reject	Complementary
					HP_Mot	OC - OSP	-H4b	.013	.100	ed	Direct only effect
HP_M - EP	H1b	.067			HP_Mot	AC - EP	-H3b	.016	.399	Accept	Direct only effect
			.16	Reject	HP_Mot	CC - EP	-H3b	.027	.373	ed	Direct only effect
			6	ed					.290	Reject	
					HP_Mot	NC - EP	-H3b	032		ed	Direct only effect
HP_O - OSI	H2c	.182			HP_Mot	OC - EP	-H3b	.007	.256	Rejected	Direct only effect
					HP_Opp	AC - OSP	-H4c	.275	.443	Rejected	Complementary
			.00	Accepted	HP_Opp	CC - OSP	-Н4с	.103	<.001		Complementary
			4		HP_Opp	NC - OSP	-Н4с	.041	.017	Rejected	Direct only effect
HP_O - EP	H1c	.239			HP_Opp	OC - OSP	-Н4с	.238	.204	Rejected	Complementary
					HP_Opp	AC - EP	-Н3с	.147	<.001	-	Complementary
				Accepted	HP_Opp	CC - EP	-Н3с	.082	.001	-	Complementary
			<.0		HP_Opp	NC - EP	-Н3с	021	.046	,	Direct only effect
			01		HP_Opp	OC - EP	-Н3с	.134	.336	•	Complementary
					- 11					Accepted	
									.003	Accepted	
										Rejected	
										Accepted	

Note: N = 205. Estimates (betas) are reported above along with their p-values where p < .001; p < .01; p < .05; and p < .10 show significan level.

#### Discussion

As the comprehensive and extended model was used in the study for which theoretical evidence existed, but there was a need to explore the empirical evidence. With the help of key variables used in the model, the study attempted to examine the effect of HPWS practices on performance in the presence of commitment as a mediator.

The results of this study showed that there is a positive effect of ability and opportunity enhancing HPWS practices on employee affective commitment as a result of which they perform better and improve organizational performance. The results are similar to previous findings (Gould-Williams, 2003; Meyer & Smith, 2000) and showed that when employees observe that HR practices are supportive and

intended to develop a social exchange association with them (Appelbaum *et al.*, 2000; Meyer & Smith, 2000), the affective commitment is established between them and the organization. Organizations that provide training to employees for improving their skills focus on their long-run potential engage them in problem-solving and decision making and provide opportunities of discretion in doing work are expected to have employees who are emotionally attached to the organization and feel that they are essential and being appreciated. With this feeling, employees perform better and enhance subjective organizational performance.

The findings of the study suggested that there is a significant relationship between ability and opportunity enhancing HPWS practice, continuance commitment, and performance. Allen and Meyer (2000) also found a significant association between HR practices and continuance commitment. When organizations provide their employees with benefits like training on expertise, acknowledge their achievements and offer them good retirement plans, they will stay with the organization. They will sacrifice even if they have better alternatives and continue the employment relationship with the organization by performing better and contributing towards the organizational performance.

Results of the study showed that HPWS practices, normative commitment, and performance are not significantly related, as were predicted. These results are not consistent with the results of other studies that found a positive association between HPWS practices and normative commitment (Gould-Williams, 2003; Meyer & Smith, 2000). However, according to Allen and Meyer (1996), normative commitment is negatively or positively or non-linked with the performance of an employee. The findings of another study revealed that normative commitment is less related to job performance as compared to affective commitment (Meyer *et al.*, 2002).

Hence, it can be concluded that employees do not feel a moral obligation towards their organization and might not perform well if they find a better job elsewhere or if there is lack of training or development opportunities or if the organization does not provide them with secure employment prospects and bright career opportunities.

Ability and opportunity enhancing HPWS practices, occupational commitment, and performance are significantly related. This is one of the major contributions of this research as this form of employee commitment has not been explored as a mediator between HPWS and performance. The study of Nabi (2003) explained that HRM practices influenced the occupational commitment of an employee. Various researchers (Armstrong-Stassen & Cameron, 2005; Khilji & Wang, 2007; Poon, 2004) described that occupational commitment of employees is dependent on perceptions of employees about organization's effort to fulfill career development requirements of them. According to the results of the present study, organizations that provide care and value the contributions of employees, in return, experience a professional, satisfied, and committed workforce, which in return help in enhancing employee performance as well as organizational performance. Hence, occupational commitment is an essential factor that can improve performance.

HPWS practices that relate to motivation to participate were not found to be statistically significant in this study. Savanevičienė and Stankevičiūtė (2011), in a very similar study to this, studied the association between the use of HPWS practices (based on the AMO framework), job satisfaction, and organizational commitment.

They also found both motivation and engagement (opportunity) enhancing HRM practices to be significantly correlated with organizational commitment, however, to a lesser degree. From a theoretical rather than an empirical point of view, it is interesting that ability and opportunity enhancing HPWS practices are consequently more significantly associated with organizational commitment, than, e.g., motivation-enhancing HPWS practices (e.g., high wages and reward systems). Hence, dissatisfaction with pay and lack of performance appraisal decreases the commitment level of employees and has a negative effect on their performance.

This research attempted to explore the extent to which HPWS practices could influence employees' attitudes; employee commitment, which in turn has a positive impact on the performance of public sector organizations. Hence the present study made an effort to bridge a link between HPWS practices and employees as well as an organizational performance by uncovering the significance of employees' attitudes at work (employee commitment). The present study will help the practitioners and managers of HR to develop such a system of HPWS practices that can help the organization to flourish and stay competitive in the marketplace by eliciting the right employee attitudes and behaviors.

In public sector financial institutions of Pakistan, there is a need to consider motivation-enhancing HPWS practice as an essential factor for enhancing performance. Organizations should provide their employees with competitive pay packages, and appraisals should be given for personal development. Moreover, normative commitment is an essential element of organizational commitment. There is a need to look upon this form of commitment. Normative commitment can be increased by providing proactive HR practices that, in turn, will enhance the trustworthiness and credibility of the employee in the organization.

## Strengths, Limitations and Future Recommendations

Like every research, this research also has its strong points and drawbacks. One of the most important strengths of this study is the data collection method. Data was gathered from two sources: employees and their supervisors. The employees reported about their work attitudes, i.e., four forms of employee commitment, and the supervisors evaluated their in-role performance. It means a sample of employee-supervisor dyad was used to avoid the biases of common-method variance, which could harm the reputation of research results.

Despite several valuable contributions, the limitations of the study cannot be ignored when interpreting the results. The first one is the cross-sectional design of the study. It means the study was conducted at one time period, so one cannot deduce the cause-effect relationships from the findings of the study. It is recommended that future research may be performed on a longitudinal design. Second, this research did not introduce any potential moderator in the mediated relationship between HPWS practices and performance. In the future, the relationship mentioned above may be studied in the presence of moderators that might influence the results. Third, the four forms of commitment were used individually to check the mediation effects of HPWS practices and performance. It is recommended to explore the inter-relationships among these forms of commitments as mediators, which may produce some exciting results.

The last limitation is the sample of the study, which were the employees of public sector financial institutions of Lahore and Sargodha. It limits the generalizability of its findings. The results of the study may differ if the sample from some other sector is chosen because employees working in other public sector organizations might show different preferences regarding their aspects of work.

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