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## Article

# Cross-level relationship of implemented high performance work system and employee service outcomes: The mediating role of affective commitment

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# **Cross-Level Relationship of Implemented High Performance Work System and Employee Service Outcomes: The Mediating Role of Affective Commitment**

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## **Abstract**

This study examines cross-level relationship between implemented high performance work system (HPWS) and employee service related behaviors along with the mediating effects of employees' affective commitment between this relationship. Although, research studies have confirmed the positive linkage between high performance work system (HPWS) and firm performance. Previous studies were criticized for being management-centric with insights mostly from manufacturing and Western context. Using multilevel approach, this research examines the relationship of bank branch managers' implemented HPWS with (i) employees' service performance and their (ii) service oriented organizational citizenship behavior (OCB) with a particular focus on studying affective commitment as a mediator. For the purpose of this study, data from branch managers of 323 bank branches operating in Punjab, Pakistan and their 1369 front line employees were used. Hierarchical linear modeling (HLM) was applied to test cross-level hypotheses of this study. Study results revealed that implemented HPWS was significantly related with employees' service performance and their service related discretionary behavior. Further, affective commitment partially mediated both the direct relationships between implemented HPWS and employees' service related behaviors. Empirical findings of this study implied that effectively implemented HPWS by branch managers has the potential to influence affective commitment level of front line employees which further influence their customers service related behaviors. This study contributes by highlighting the potential influence of branch managers' implemented HPWS on service related behaviors of employees.

**Keywords:** high performance work system (HPWS), service performance, service oriented OCB, banking sector, affective commitment.

## **1. Introduction**

Employees have been considered the major source of competitive advantage in contemporary business organizations. For this reason, organizational human resource

management function is devised to achieve competitive advantage through managing its workforce. Consequently, an entirely separate area of research, called strategic human resource management (SHRM), has emerged. In this field of study, researchers and scholars extensively investigated the effects of a set of interrelated HR practices (known as high performance work system: HPWS) on various organizational performance outcomes with favorable findings consistently (e.g. Huselid, 1995; Delery & Doty, 1996; Youndt et al., 1996; Guthrie, 2001; Takeuchi et al., 2007). However, despite of considerable development regarding HPWS-performance linkage, researchers have highlighted following issues which require further research investigation to carry forward this research area.

First, researchers have criticized SHRM literature for being managerially biased (Boxall & Macky, 2014; Heffernan & Dundon, 2016) because of its primary focus on management perspective while examining HPWS-performance relationship. The scholars emphasized on the inclusion of employees' perspective in order to have more meaningful insights regarding the HPWS-performance relationship. In addition to this, although few studies have recently investigated the relationship of HPWS with employee outcomes such as job satisfaction, organizational commitment, citizenship behaviors and turnover intentions (Sun et al., 2007; Kuvaas, 2008; Gong et al., 2009), the findings of these studies are not consistent (Van De Voorde et al., 2012). Second, researchers have highlighted that previous studies have used intended HPWS (top management/ HR department reported), whereas, in reality, the intended HPWS may not be implemented in the same way throughout the organization as intended (Khilji & Wang, 2006; Nishii & Wright, 2007; Wright & Nishii, 2013). Resultantly, a new stream of research has emerged recently within SHRM where researchers have started studying the effects of implemented HPWS by line managers (called manager-HPWS in literature), instead of intended HPWS (e.g. Aryee et al., 2012; Chuang et al., 2013; Pak & Kim, 2016), on performance outcomes.

Third, despite of the consensus on positive HPWS-performance relationship in literature, the intermediary mechanisms (processes) for explaining the effects of HPWS on employee outcomes have not been fully explored yet (Becker & Huselid, 2006; Guest, 2011; Jiang et al., 2013; Boxall et al., 2016) and this issue is widely acknowledged as “Black Box” problem in SHRM literature (Wright & Gardner, 2003; Guest, 2011). Next, the HPWS-performance linkages is too distant and complex where HR policy is intended at organizational level and then implemented at departmental or group by line managers, then how workers perceive and experience organizational HRM further influences their attitudes, behaviors and performance outcomes (Bowen & Ostroff, 2004; Takeuchi, et al., 2009). Therefore, researchers in SHRM area have used multilevel approach to link and empirically test the relationship among variables conceptualized at different levels of analysis (e.g. Liao et al., 2009; Aryee et al., 2012; Pak & Kim, 2016). Contrary to this, however, hardly any study in Pakistan has used multilevel approach while examining the complex and distant HPWS-performance relationship.

Finally, manufacturing sector has been the main focus by majority of the researchers while examining HPWS-performance relationship (Combs et al., 2006). Managing human resources is even more critical in service settings because of its complex nature of operations (Bowen & Schneider, 1988) but a limited number of studies have contributed to the SHRM literature through insights from the service sector. In addition to this,

recently, Posthuma, et al., (2013) reported that majority of studies investigated the HPWS-performance relationship were conducted in developed countries and in a Western context.

Therefore, in order to address above mentioned gaps in literature, this study aims to hypothesize and empirically test a multilevel model linking manager-HPWS with employees' service related behaviors (service performance and service oriented OCB) in bank branches operating in Punjab, Pakistan. Further, this study also hypothesizes and empirically tests affective commitment as mediating variable for the linkage between manager-HPWS and employee service behaviors. Based upon social exchange theory (Blau, 1964) and norm of reciprocity (Gouldner, 1960), a positive relationship of manager-HPWS with affective commitment and employee service related behaviors is hypothesized in this study. According to social exchange theory, organizational work practices in form of HPWS implemented establish a positive environment in the workplaces for employees that lead to higher level of employee commitment, task performance and retention (Gouldner, 1960; Wayne, et al., 1997; Erdogan & Enders 2007). Therefore, it is argued that HPWS implemented by bank branch managers offers social and economic inducements to which employees reciprocate in form of favorable attitudes and behaviors while serving customers.

This study has several important implications. First, using multilevel approach, this study proposes and testes cross-level effects of implemented HPWS by line managers (branch level of analysis) on affective commitment and service related behaviors (individual level of analysis). Although some researchers have used multilevel approach while studying HPWS-performance relationship (e.g. Liao et al., 2009; Aryee et al., 2012; Pak & Kim, 2016), hardly any study in Pakistan has used such approach while examining the complex HPWS-performance relationship. In this way, this would prove as ground breaking study in Pakistan, using multilevel approach to examine relationships among variables conceptualize at different levels of analysis. Second, this study advances the literature by including employees' perspective while studying HPWS-performance relationship. Previous literature has been criticized for using management perspective, mainly, while studying HPWS-performance relationship (Boxall & Macky, 2014; Heffernan & Dundon, 2016). Third, this study advanced the body of literature on HPWS-performance by studying the influence of implemented, instead of intended, HPWS on employee outcomes. Fourth, this study hypothesizes and tests affective commitment as mediating mechanism to explain the relationship between implemented HPWS and employee behaviors. In the last, this study is conducted in service sector where there is dearth of literature compared to HPWS-performance relationship studied in manufacturing sector.

## **2. Literature Review and Hypotheses Development**

Strategic HRM denotes to “the pattern of planned human resource deployments and activities intended to enable an organization to achieve its goals” (Wright & McMahan, 1992, p. 298). It focuses on a bundle of HR practices (known as HPWS) which are mutually reinforcing and generate synergistic impact (Huselid, 1995). In his ground breaking study of more than 800 manufacturing companies, Huselid (1995) identified significant positive relationship between organizational HPWS and firm profits, market value and turnover. This study acted as spring board for a significant body of research that empirically confirmed the relationship between HPWS and various organizational performance outcomes including profitability, growth, productivity, turnover and various

other financial and non-financial performance metrics (e.g., Arthur, 1994; Delaney & Huselid, 1996; Delery & Doty, 1996; Appelbaum et al., 2000; Guthrie, 2001; Datta et al., 2005).

A step further, Becker et al., (1997) asserted that in the distant and complex HPWS-performance relationship, organizational HPWS first impact employees' attitude and behaviors, which in turn influence firm performance. They asserted that it is critical to include employee outcomes in HPWS-performance research in order to have thorough understanding about this relationship. Recently, Van De Voorde et al., (2012) presented a review of 36 studies examined HPWS and employee outcomes relationship and concluded that the findings of these studies are inconsistent. They called for more research efforts regarding the relationship of HPWS with employee outcomes compared to organizational level outcomes to advance the research area. Therefore, this study intends to investigate the relationship among implemented HPWS, affective commitment and employee service related behaviors (i.e. service performance and service oriented OCB) in order to advance the understanding about HPWS and employee outcomes where findings of previous studies are inconclusive. This section will discuss the theoretical underpinnings and present the review of relevant literature for hypotheses development as depicted in Figure 1.

### *2.1 Manager-HPWS and Employee Service Outcomes*

Employee service performance demarcates as “the overall professional appearance and the reliability, responsiveness, assurance, and empathy displayed by employees in serving customers” (Liao et al., 2009, p. 378). It is considered as one of the major determinant of service quality and clients related outcomes (Subramony & Pugh, 2015). Drawing upon the logics of social exchange theory, a favorable relationship between manager-HPWS and employee service related behaviors could be expected. According to social exchange theory, “favors that create diffuse future obligations, not precisely specified ones, and the nature of the return cannot be bargained about but must be left to the discretion of the one who makes it” (Blau, 1964, p. 93). In other words, employees' perceptions regarding work systems implemented by their employer shape their reactions towards employer (Masterson et al., 2000). Several components of an organizational HPWS have the potential to influence employee behaviors including the behaviors related to customer services. For example, incentive based pay linked with service performance, service performance based performance appraisals, service discretions and extensive service related trainings are the elements of organizational HPWS focused on superior service performance in order to ensure high quality services. Saying it differently, effectively implemented HR practices in form of HPWS enhance employees' competence, motivation and opportunity to perform which further leads towards superior customer services (Liao et al., 2009).

Moreover, the extant literature demonstrates that researchers have examined the association of HPWS with various employee outcomes like organizational commitment, job satisfaction, and OCB (e.g. Sun, et al., 2007; Kuvaas, 2008; Kehoe & Wright, 2013) but reported inconsistent findings (Van De Voorde et al., 2012). For instance, Chuang and Liao (2010) results indicated that HPWS is positively linked with performance of the employees working in retail stores operating in Taiwan. Similarly, Snape and Redman (2010) investigated the association between HPWS and in-role performance of the employees but failed to find empirical support for their proposed relationship. Chang and

Chen (2011) also investigated HPWS and employee job performance relationship through multiple mediators. Their findings indicated that the relationship between HPWS and job performance is mediated by organizational commitment and human capital. Furthermore, Liao and Chuang (2004) were the first to study the association of organizational HPWS with employee service performance in a US-based chain of restaurants. Besides this, Liao et al., (2009) also examined the effects of perceived HPWS on service performance of employees through multiple mediators in a national bank of Japan. Likewise, Imran and Fatima (2015) concluded that employees' perceived HPWS are related with their service performance and psychological empowerment mediated this relationship in service organizations based in Pakistan. However, they conducted this study at individual employee's level of analysis. Therefore, based upon the above discussion, the following relationship could be expected:

- **H<sub>1</sub>:** Manager-HPWS has significant positive relationship with employee service performance.

Next, organizational citizenship behaviors (OCBs) refers to employees' discretionary behaviors which "do not support the technical core itself as much as they support the organizational, social, and psychological environment in which the technical core must function" (Borman & Motowidlo, 1993, p. 73). Researchers have also identified consistent favorable association between employees' OCB and various organizational performance outcomes (e.g. Podsakoff et al., 1997; Whitman et al., 2010). Previous literature on the linkage between HPWS and employee outcomes has shown that several authors have studied the linkage between HPWS and employee OCB (e.g. GONG & CHANG, 2008; Messersmith et al., 2011; Riaz, 2015). Adding to this, Borman and Motowidlo (1993) asserted that "some types of OCBs are probably more appropriate for certain types of organizations than others. Service companies have special requirements on dimensions related to dealing with customers and representing the organization to outsiders" (pp. 90). Resultantly, Bettencourt and Brown (1997) introduced the construct of "service-oriented OCB" representing the "discretionary behaviors of contact employees in servicing customers that extend beyond formal role requirements" (pp. 41). In HPWS-performance research, employer's efforts in form of HRM practices are considered useful tool for producing and motivating employees for discretionary behaviors (Morrison, 1996). Thus, various HR practices in organizational HR system, as discussed previously, have the potential to provide context that promotes discretionary behaviors among employees (Sun, et al., 2007). Previously, Yung Chou & Lopez-Rodriguez (2013) examined the association between employees' justice perceptions and their service oriented OCB and concluded that employees' justice perceptions significantly influence their discretionary behaviors while serving customers. Although previous studies have investigated the relationship between HPWS and OCB, however, either these studies were conducted at single level of analysis or they examined the effects of organizational intended HPWS on individual employee's OCB. Rarely any study has investigated the relationship between implemented HPWS by line managers and employees' OCB. In addition to this, organization specific discretionary behavior has also hardly been considered while studying HPWS and employees' discretionary behavior relationship. Thus, the following relationship could be expected:

- **H<sub>2</sub>:** Manager-HPWS has significant positive relationship with employee service oriented OCB.

### 2.2 *Manager-HPWS, Affective Commitment and Employee Service Outcomes*

Previous studies on HPWS-performance relationship have shown that organizational HPWS has linked favorably with organizational and individual employees' performance outcomes (Jiang et al., 2013). However, recently, scholars have identified the need to explore the intermediary mechanisms that link organizational HPWS with employee behavioral outcomes. Guest (1997) argued that HPWS influence organizational outcomes through employees and not directly. Although researchers have investigated mediating role of organizational commitment, job satisfaction and employee engagement for HPWS and employee outcomes relationship, findings of these studies are inconsistent (Van De Voorde et al., 2012). For example, Kehoe and Wright (2013) reported that affective commitment fully mediated perceived HPWS and turnover intentions relationship, whereas in case of perceived HPWS and OCB relationship, affective commitment partially mediated the relationship. Next, Kuvass (2008) hypothesized affective commitment as mediating variable between employees' perceived HPWS and turnover intentions but was unable to generate empirical support for the proposed relationships. Similarly, Nishii et al., (2008) suggested that job satisfaction may mediate the linkage between employees' attributions of HR practices and their OCB but they had not test it specifically. Recently, Raineri, (2016) investigated the mediating role of collective affective commitment and human capital between HPWS and business unit performance at organizational level of analysis and concluded that both the variables partially mediated the said relationship. Likewise, Huang et al., (2017) identified that employees' mood and job satisfaction mediated the relationship between perceived HPWS and employee engagement. Based upon this discussion, this study hypothesized that affective commitment acts as a mediating variable for the relationship between manager-HPWS and employees' service related behaviors (employee service performance, service oriented OCB). Thus, following hypotheses are established for empirical testing:

- **H3:** The relationship between manager-HPWS and employee service performance is mediated by affective commitment.
- **H4:** The relationship between manager-HPWS and employee service oriented OCB is mediated by affective commitment.

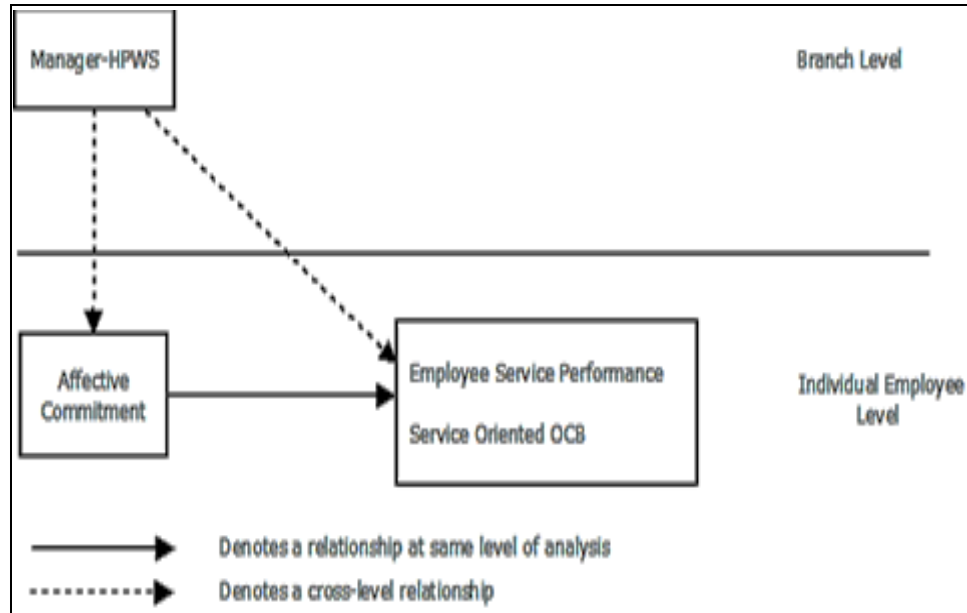


Figure 1: Conceptual Framework

### 3. Methodology

#### 3.1 Population, Sample and Procedure

For this research, 450 bank branches were selected randomly from a total of 6,581 branches of 30 commercial banks operating in Punjab, Pakistan. Data from 323 branches (71.8% response rate) and their 1369 employees were finally used for data analysis purpose after discarding incomplete and inappropriate responses. Data for current study was gathered through self-administered survey from two sources (i.e. branch manager and front line service employees) due to the multilevel nature of the study. Branch managers were asked to rate the high performance work system (HPWS) implemented in their respective bank branches while responses on affective commitment, employee service performance and service oriented OCB were collected from front line service employees.

Out of 323 bank branches participated in this survey, 236 (73%) belonged to private banks, 49 (15.2%) were branches of state-owned banks, 31 (9.6%) were branches of Islamic banks and remaining seven (2.2 %) branches belonged to specialized banks. It was observed that average branch size (number of employees) comprised of 13.55 (SD = 6.50) employees. Moreover, mean age of the participating branches was 14.35 (SD = 11.90) years. On the other side, out of 1369 front line service employees participated in this study, 1067 (78%) were male and rest 302 (22%) were female. Further, average age of employees was 29.70 (SD = 5.82) years. Further, only three (.2%) employees had education level below intermediate, 484 (35.4 %) had 14 years of education, 799 (58.4 %) had 16 years of education, 81 (5.9%) had 18 years of education and remaining two (.1 %) employees had a doctoral degree.



### 3.2 Measures

Current study adopted already developed measures used in previous research endeavors to ensure the validity of the measurement tools. All the responses were recorded on a 5-point Likert scale ranging from 5 (completely agree) to 1 (completely disagree). Following subsections delineate brief description of measures used in this study.

#### 3.2.1 Manager-HPWS

Manager-HPWS was assessed by using a 37-item scale designed by Liao et al., (2009) for ensuring service quality in banks. Consistent with the previous practices, this study used HPWS as a unitary index (e.g. Huselid, 1995; Liao et al., 2009; Chuang & Liao, 2010; Ostroff & Bowen, 2000; Pak & Kim, 2016), a fundamental assumption of SHRM that the effects of organizational HR practices could be better comprehended by studying them in form of HR system rather than examining them individually. Sample item for this variable includes: “The formal orientation programs to new employees are helpful for them to perform their jobs”. The reliability (Cronbach’s Alpha) score of manager-HPWS scale in this study was .94.

#### 3.2.2 Affective Commitment

A 5-item scale from the study of Meyer and Allen (1997) was employed to gauge the affective commitment level of front line service employees. Sample item for this construct includes “I feel a strong sense of belonging to my organization”. The reliability (Cronbach’s Alpha) score of affective commitment scale in this study was .81.

#### 3.2.3 Employee Service Performance

A 7-item scale designed by Liao and Chuang (2004) was employed to measure the service performance of front line employees. Sample item for this variable includes “I always try to approach customers quickly”. The reliability (Cronbach’s Alpha) score of employee service performance scale in this study was .88.

#### 3.2.4 Service-Oriented Organizational Citizenship Behavior

A 16-item measure by Bettencourt et al., (2001) was employed to gauge the service oriented OCB of front line employees. Sample item for this construct includes “I actively promote the branch’s products and services”. The reliability (Cronbach’s Alpha) score service oriented OCB scale in this study was .91.

### 3.3 Control Variables

Due to cross-level nature of this study where manager-HPWS was hypothesized at branch level of analysis whereas affective commitment, service performance and service oriented OCB were at individual level of analysis, this study used control variables at both levels of analysis. First, at branch level of analysis, this study considered branch age (in years) and branch size (number of employees) as control variables. Further, individual employee's age (in years) and gender (Female = 0, Male = 1) were used as control variables at individual level of analysis. These factors were identified as control variables by previous studies in the context of SHRM research while conducting cross-level analysis (e.g. Liao et al., 2009; Pak & Kim, 2016).

### 3.4 Analytical Strategy

In this scientific investigation, employees were nested within bank branches with a theoretical model having branch level HPWS and individual employee outcomes, which

is also hierarchical. Saying it simply, current study has conceptualized variables at two level of analysis where manager-HPWS was conceptualized at branch level analysis while other three variables (affective commitment, service performance and service oriented OCB) were at individual level analysis. For these types of cross-level relationships, two-level hierarchical linear modeling (HLM; Bryk & Raudenbush, 1992) was employed by researchers (e.g. Liao & Chuang 2004; Liao et al.,2009; Aryee et al.,2012; Pak & Kim, 2016) which is argued to be the more robust statistical tool for cross-level relationship testing with substantial benefits and advantages over conventional regression analysis (see. Bryk & Raudenbush, 1992).

#### **4. Data Analysis and Results**

##### *4.1 Validity of Study Measures*

Before testing hypotheses of this study, confirmatory factor analysis (CFA) was conducted to confirm validity (convergent and discriminant) of study variables (e.g. Alfes et al., 2013; Pak & Kim, 2016). Convergent validity of the variables was assessed through factor loading score of each item on its respective construct (Parasuraman, et al., 1991; Park, et al., 2006). All the items, except for item “All business memos of this branch are shared with employees” of manager-HPWS and item “I perform duties with unusually few mistakes” of service oriented OCB, had a loading score greater than .40. Only those items having a loading score of .40 or above were used for further data analysis (Comrey, 1978).

Further, for the purpose of confirming the discriminant validity of study variables, several model fitness indices generated by CFA were used to compare the model fit of the proposed four-factor measurement model with the alternative ones (Hair, Black, Babin, & Anderson, 2009; Alfes et al., 2013; Pak & Kim, 2016). According to previous researches, a value of above .90 for CFI, IFI and TLI are acceptable whereas the value for  $\chi^2/df$  should be less than 3 (Browne & Cudeck, 1993; Hall, Snell, & Foust, 1999; Kline, 2005). Further, the value of RMSEA should be less than .08 (Browne & Cudeck, 1993; Hu & Bentler, 1999). As shown in Table 1, hypothesized four-factor measurement model of this study showed a better model fit compared to the three alternative models and thus confirmed discriminant validity of our proposed four-factor model. CFA confirmed the validity (convergent and discriminant) of constructs used in this study and thus warrants the appropriateness of data for hypotheses testing.

**Table 1: Comparison of Measurement Model (Discriminant Validity)**

Models	$\chi^2/df$	IFI	TLI	CFI	RMSEA
Proposed Four-Factor Model	2.98	.92	.90	.92	.04
Three-Factor Model <sup>a</sup>	4.11	.86	.85	.86	.05
Two-Factor Model <sup>b</sup>	5.60	.80	.78	.80	.06
One-Factor Model <sup>c</sup>	6.55	.75	.73	.75	.06

Notes.  $\chi^2$ ; Chi-square discrepancy, df; Degrees of freedom, IFI; Incremental fit index, TLI; Tucker–Lewis index, CFI; Comparative fit index, RMSEA; Root mean square error of approximation.

<sup>a</sup> HPWS and employee engagement combined into single factor,

<sup>b</sup> HPWS, employee engagement and service performance combined into single factor,

<sup>c</sup> all variables combined into single factor

#### 4.2 Descriptive Statistics, Construct Reliability and Correlation Analysis

Table 2 reports the descriptive statistics results along with the Cronbach's Alpha reliability values and correlation between the variables of the study. The correlations between the key variables of the study were found significant at less than one percent level of significance. Further, due to high correlation between both dependent variables, confirmatory factor analysis (CFA) was employed. The fit indices demonstrated a good model fit for the hypothesized two-factor model ( $\chi^2/df = 679/165 = 4.1$ ,  $p < 0.001$ , CFI = .96, IFI = .96, TLI = .95, GFI = .95 and RMSEA = .048) compared to the single-factor model ( $\chi^2/df = 956/166 = 5.76$ ,  $p < 0.001$ , CFI = .89, IFI = .88, TLI = .86, GFI = .88 and RMSEA = .06). Therefore, we treated service performance and service oriented OCB as two separate variables as proposed initially. Moreover, reliability values (Cronbach's Alpha) for manager-HPWS, affective commitment, service performance and service oriented OCB were .94, .81, .88 and .91 that well qualified the reliability criterion of above .70 (Nunnally, 1978).

**Table 2: Descriptive Statistics, Scales Reliability and Correlation Results**

Variable	Mean	SD	Alpha	1	2	3	4	5	6	7
<b>1. Branch Size</b>	13.55	6.50	-							
<b>2. Branch Age</b>	14.35	11.9	-	.09*						
<b>3. Gender</b>	-	-	-	.01	.02					
<b>4 Age</b>	29.70	5.82	-	.05*	.07*	.18*				
<b>5. Manager-HPWS</b>	3.92	.51	.94	.12*	-.20**	-.01	-.02			
<b>6. Affective Commitment</b>	3.78	.70	.81	.03	-.04	.05	.04	.25*		
<b>7. Service Performance</b>	4.00	.65	.88	.09*	-.10**	-.01	.01	.30*	.49*	
<b>8. Service-OCB</b>	3.98	.59	.91	.07*	-.14**	.02	-.01	.33*	.57*	.77*

Notes. Branch size is in terms of number of employees; Branch age in years;  
 \* p <0.05. \*\* p <0.01.

*4.3 Hypotheses Testing*

This study hypothesized that manager-HPWS has positive relationship with service performance (H<sub>1</sub>) and service oriented OCB (H<sub>2</sub>). Furthermore, this study proposed that the manager-HPWS and service performance relationship is mediated by affective commitment (H<sub>3</sub>). Finally, this research also hypothesized that the association of manager-HPWS and employee service oriented OCB is mediated by affective commitment (H<sub>4</sub>). All the hypothesized relationships of current study were cross-level and therefore, the null models for both the outcome variables were tested before hypotheses testing to identify between-group variance for dependent variables (Mathieu & Taylor, 2007; Hox, 2010). The results of null models depicted between-group values ( $\tau_{00} / \tau_{00+} \sigma^2$ ) as: .33 for service performance ( $\chi^2 = 1022.18, p < .01$ ) and .34 for service oriented OCB ( $\chi^2 = 1041.91, p < .01$ ). These between-group values demonstrated 33% between-group variance in case of service performance and 34% between-group variance in case of service oriented OCB (Bryk & Raudenbush, 1992). These findings from the null models identified that significant variance among bank branches exist in case of outcome variables (i.e. service performance and service oriented OCB) which justified hypotheses testing by using hierarchical linear modeling (HLM) instead of conventional regression analysis through disaggregation of data.

The findings demonstrated in Table 3 (Model 1) highlighted that manager-HPWS is significantly related ( $\gamma = .36, p < .01$ ) to the service performance of front line employees,

thus, supported the first hypothesis of study. These findings indicated that one unit increase in manager-HPWS would cause .36 units increase in service performance of front line service employees. Further, the findings presented in Table 4 (Model 1) depicted that manager-HPWS and service oriented OCB linkage was also found significant ( $\gamma = .37, p < .01$ ), thereby generated empirical support for H<sub>2</sub> of the study. These results demonstrated that one unit increase in manager-HPWS would cause .37 units increase in service oriented OCB of front line service employees. Collectively, these results showed that the direct relationship of manager-HPWS with employee service performance (H<sub>1</sub>) and service oriented OCB (H<sub>2</sub>) were empirically substantiated. In other words, the premise of the research got empirical support that HPWS implemented by the bank branch managers acts as a significant antecedent for employees' service related behaviors (service performance and service oriented OCB). These findings revealed that organizational work practices implemented by branch managers create an environment in bank branches which enhances and reinforces favorable behaviors of employees while serving customers. This implemented HPWS not only improves the service performance behavior of employees as defined by their job description but also encourages them to exhibit discretionary behaviors more frequently while serving customers. Both of these behaviors (service performance and service oriented OCB) are considered as significant determinants of service organizations' capacity of maximizing service quality.

Further, this study analyzed cross-level mediation relationships (H<sub>3</sub> and H<sub>4</sub>) as outlined by Zhang et al., (2009). According to them, for cross-level mediation analysis, level-2 predictor (i.e. manager-HPWS) should be significantly related to the outcome variable at level-1 (i.e. service performance and service oriented OCB). In the next step, the level-2 predictor (i.e. manager-HPWS) should also be related significantly to level-1 mediating variable (i.e. affective commitment). At third step, the level-1 mediating variable should be significantly associated with level-1 outcome variable (i.e. service performance and service oriented OCB). In the last step, upon entering level-2 predictor (i.e. manager-HPWS) and level-1 mediator (i.e. affective commitment) in HLM equation simultaneously, the effects of independent variable either reduces (partial mediation) or changes to insignificant (full mediation).

In case of testing the mediating effects of affective commitment for manager-HPWS and service performance linkage, H<sub>1</sub> of the study already demonstrated that manager-HPWS was significantly related ( $\gamma = .36, p < .01$ ) to employee service performance (satisfied first condition of cross-level mediation). In second step, results shown in Model 2 of Table 3 highlighted that manager-HPWS was significantly related ( $\gamma = .35, p < .01$ ) to affective commitment indicating .35 units increase in affective commitment due to one unit increase in manager-HPWS. Next, demonstrated in Model 3 of Table 3, affective commitment was related significantly ( $\gamma = .36, p < .01$ ) with employee service performance indicating .36 units increase in service performance because of one unit increase in affective commitment level of front line employees. In the last, upon entering manager-HPWS and affective commitment simultaneously in HLM equation, the effects of manager-HPWS reduced (from  $\gamma = .36$  to  $\gamma = .31$ ) but remained significant indicating partial mediation as shown in Model 4 of Table 3. In short, above analysis showed that manager-HPWS and service performance linkage was partially mediated by affective commitment (H<sub>3</sub> supported). These results reflected that HPWS implemented by bank branch managers have the capacity to improve the affective commitment level of

employees which encourages them to demonstrate superior service performance. In other words, in case of effectively implemented HPWS by branch managers, employees reciprocate in form of enhanced commitment with their employer which in turn reflected in their behaviors while serving customers.

**Table 3: Hierarchical Linear Modeling (HLM) for Service Performance**

Level and Variables	Null Model	Model 1	Model 2	Model 3	Model 4
<b>Intercept</b>	4.00(.03)**	4.00(.02)**	3.78(.03)**	4.00(.03)**	4.00(.02)**
<b>Level 01 (n=1369)</b>					
<b>Gender</b>		-.02(.04)	.05(.05)	-.03(.03)	-.03(.04)
<b>Age</b>		.01(.02)	.03(.03)	-.01(.02)	-.01(.02)
<b>Affective Commitment</b>				.36(.04)**	.35(.04)**
<b>Level 02 (n=323)</b>					
<b>Branch Size</b>		.05(.04)	-.01(.04)	.08(.04)*	.05(.04)
<b>Branch Age</b>		-.03(.02)	.01(.02)	-.06(.02)**	-.03(.02)
<b>Manager-HPWS</b>		.36(.06)**	.35(.05)**		.31(.06)**
<b>Pseudo R<sup>2</sup></b>		.16	.25	.17	.16
<b>σ<sup>2</sup></b>	.28				
<b>τ<sub>00</sub></b>	.14				
<b>χ<sup>2</sup></b>	1022.18**	829.50**	808.90**	1154.26**	976.52**

Notes. Level-2 = Branch Level; Level-1 = Individual Employee Level; Branch size is in terms of number of employees; Branch age in years; HPWS = High Performance Work System; Standard errors are reported in parentheses (); σ<sup>2</sup> represents variance in Level-1 residuals. τ<sub>00</sub> represents variance in Level-2 residuals. Pseudo R<sup>2</sup> is calculated with the procedure given in Kreft and De Leeuw (1998).

\*p < 0.05. \*\*p < 0.01.

On the other hand, while testing affective commitment as mediating variable for manager-HPWS and employee service oriented OCB relationship, H<sub>2</sub> of the study already showed that manager-HPWS was significantly associated ( $\gamma = .37, p < .01$ ) with service oriented OCB. In the second step, manager-HPWS was also significantly related ( $\gamma = .35, p < .01$ ) to the affective commitment, as shown in Model 2 of Table 4, indicating that .35 units increase in affective commitment caused by one unit increase in manager-HPWS. Further, Model 3 of Table 4 demonstrated that affective commitment was also linked significantly ( $\gamma = .35, p < .01$ ) with employee service oriented OCB, third step of cross-level mediation, indicating .35 units increase in service oriented OCB caused by one unit increase in affective commitment. Finally, when both the manager-HPWS and affective commitment were put together in HLM equation, the effects of manager-HPWS reduced (from  $\gamma = .37$  to  $\gamma = .23$ ) but remained significant indicating partial mediation. In brief, the above findings represented that affective commitment partially mediated the relation of manager-HPWS with service oriented OCB, thus empirically supported H<sub>4</sub> of this study. These results revealed that HPWS implemented by bank branch managers

increases the affective commitment level of employees which encourages them to involve in discretionary behaviors while serving customers. Saying it differently, in case of effectively implemented HPWS by branch managers, employees reciprocate in form of high level of commitment with their employer which in turn reflected in form of involving in discretionary behaviors while interacting with customers.

**Table 4: Hierarchical Linear Modeling (HLM) for Service Oriented OCB**

Level and Variables	Null Model	Model 1	Model 2	Model 3	Model 4
<b>Intercept</b>	3.98(.02)**	3.98(.02)**	3.78(.03)**	3.98(.02)**	3.98(.02)**
<b>Level 01 (n=1369)</b>					
<b>Gender</b>		.04(.04)	.05(.04)	.03(.03)	.03(.03)
<b>Age</b>		-.03(.02)	.03(.03)	-.04(.02)*	-.04(.02)*
<b>Affective Commitment</b>				.35(.04)**	.34(.04)**
<b>Level 02 (n=323)</b>					
<b>Branch Size</b>		.02(.03)	-.01(.04)	.06(.04)	.03(.03)
<b>Branch Age</b>		-.04(.02)*	.02(.02)	-.08(.02)**	-.04(.02)*
<b>Manager- HPWS</b>		.37(.05)**	.35(.05)**		.23(.05)**
<b>Pseudo R<sup>2</sup></b>		.10	.12	.47	.20
<b><math>\sigma^2</math></b>	.23				
<b><math>\tau_{00}</math></b>	.12				
<b><math>\chi^2</math></b>	1041.91**	799.03**	808.89**	1202.52**	975.05**

Notes: Level-2 = Branch Level; Level-1 = Individual Employee Level; Branch size is in terms of number of employees; Branch age in years; HPWS = High Performance Work System; Standard errors are reported in parentheses ();  $\sigma^2$  represents variance in Level-1 residuals.  $\tau_{00}$  represents variance in Level-2 residuals. Pseudo R<sup>2</sup> is calculated with the procedure given in Kreft and De Leeuw (1998).

\* p < 0.05. \*\* p < 0.01.

## 5. Discussion of Results

This study was conducted with the aim of examining cross-level relationship of manager-HPWS with employee service related behaviors (service performance and service oriented OCB) and mediating effects of affective commitment for these relationships. First, this study examined the cross-level effects of manager-HPWS on employee service performance (H<sub>1</sub>) and service oriented OCB (H<sub>2</sub>). Findings of the study empirically confirmed the positive relationship between manager-HPWS and employee service related behaviors. These results provide additional support to the results of studies proposed and empirically tested positive relationship between HPWS and service related behaviors (Liao & Chuang, 2004; Liao et al., 2009; Imran & Fatima, 2015). These results are consistent with the findings of previous studies that investigate the effects of

implemented, instead of intended, HPWS on employee behaviors (e.g. Aryee et al., 2012; Chuang et al., 2013; Pak & Kim, 2016). These findings of current study revealed that properly implemented work practices, by bank branch managers, create a positive environment in the bank branches which encourages front line employees to exhibit more favorable behaviors towards customers. These findings also supported the argument that implemented HPWS by line managers, rather than intended HPWS, influence the attitudes and behaviors of employees (Khilji & Wang, 2006; Nishii & Wright, 2007; Wright & Nishii, 2013).

Moreover, in response to call for studies examining mediating mechanisms for the relationship between HPWS and employee behaviors (e.g. Jiang et al., 2013; Boxall et al., 2016), this study also examined the mediating role of affective commitment for the relationship between manager-HPWS and employee service related behaviors (H<sub>3</sub> and H<sub>4</sub>). Results of the study demonstrated that affective commitment partially mediated both the relationships between manager-HPWS and (i) service performance and (ii) service oriented OCB. These findings are consistent with the results of previous studies examined employee attitudes including job satisfaction, employee engagement and organizational commitment in between the relationship of HPWS and employee behaviors (e.g. Nishii et al., 2008; Alfes et al., 2013; Kehoe & Wright, 2013; Riaz, 2015; Raineri, 2016). However, the results of this study are different from these studies, mentioned above, in a way that these studies consider perceived HPWS while examining HPWS-employee outcomes relationship. These results of current study revealed that effectively implemented HPWS by bank branch managers develops a favorable environment which enhances commitment level of employees with their employer. These highly committed employees then demonstrate their attachment with their organizations in form of superior service performance and also discretionary behaviors while serving customers. These behaviors of front line employees related to serving customers are considered important determinants of service quality (Subramony & Pugh, 2015). This study advances the knowledge relating to HPWS and employee outcomes by linking implemented HPWS with affective commitment and employee service behaviors. These findings supported the arguments of the social exchange theory (Blau, 1964) i.e. in return of socio-emotional and economic benefits received from organizational HR practices, employees reciprocate in form of enhanced commitment, service performance and discretionary behaviors while serving customers (Liao & Chuang, 2004; Sun et al., 2007, Kehoe & Wright, 2013).

The findings of this study added to HPWS and employee outcomes literature in several ways. For instance, by proposing and empirically testing the cross-level relationship of manager-HPWS with employees' service related outcomes (service performance and service oriented OCB) as well as affective commitment as mediating variable for both relationships in the bank branches operating in Punjab, Pakistan. The study findings revealed that manager-HPWS was significantly linked with both employee service performance and employee service oriented OCB. Moreover, the findings also revealed that affective commitment partially mediated the association of manager-HPWS with both employee service performance and employee service oriented OCB. Data from branch managers of 323 bank branches and their 1369 front line employees supported our hypothesized relationships.



## 6. Implications of the Study

The results of current research have several implications for literature and practitioners. Mainly, this study has contributed by examining cross-level relationship between implemented HPWS, affective commitment, service performance and service oriented OCB. In Pakistan, hardly any study has used multilevel approach to examine the relationships among variables conceptualized at two levels of analysis. In specific, following are theoretical implications drawn from this study. First, researchers have highlighted that majority of research in this area has been done with organizational and management perspective while ignoring employees' point of view despite of being important party to organizational HR systems (Boxall & Macky, 2014; Heffernan & Dundon, 2016). Therefore, current study advanced the literature by including and empirically testing employee perspective in HPWS-performance literature. Further, only a few studies investigated the relationship of HPWS with employee outcomes and reported inconsistent findings (Van De Voorde et al., 2012). Thus, this study contributed into the literature around HPWS and employee outcomes by generating empirical evidence from the banking sector operating in Pakistan. Next, this study has used implemented, instead of intended, HPWS which is more appropriate and proximal antecedent of employee outcomes (e.g. Aryee et al., 2012; Chuang et al., 2013; Pak & Kim, 2016). These findings added to the literature by examining the association of implemented HPWS with employee outcomes instead of intended HPWS (Nishii & Wright, 2007). Finally, this study proposed and empirically tested affective commitment as intermediary mechanism to link manager-HPWS with employees' service related outcomes. By doing so, this study added to the debates around the exploration of the "Black Box" (Guest, 2011; Boxall et al., 2016) in SHRM literature.

This study also has methodological implications. The study has proposed multilevel conceptual framework and empirically tested it by using HLM. Researchers have investigated cross-level relationships in SHRM research (e.g. Liao et al., 2009; Aryee et al., 2012; Pak & Kim, 2016) because of the complex nature of HPWS-performance relationship. However, as far the authors know, no published research in SHRM has used multilevel approach in case of SHRM research in Pakistan. Therefore, in case of Pakistan, this study would be proved a trend setter in case of scientific investigations using multilevel modeling approach in SHRM research specifically and organizational studies in general.

Along with implications for literature, this research also has important implications for managers and practitioners in organizations. First, the results of current study have highlighted that HPWS as implemented by the branch managers in bank branches has the capacity to influence employees' service related behaviors including employee service performance and service oriented OCB. These behaviors are considered important determinants of service quality (Subramony & Pugh, 2015). Next, the findings also highlighted the role of affective commitment as mediator that transmits the effects of branch manager's implemented HPWS to service related behaviors of front line employees working in banks. Furthermore, considering branch managers as the implementers of organizational intended HR practices, the HR department is required to work closely with them to ensure proper implementation of organizational HPWS in order to get maximum benefits for the organization (Purcell & Hutchinson, 2007).

## 7. Conclusion

The aims of this study were to examine cross-level effects of manager-HPWS on service performance and service oriented OCB and mediating role of affective commitment for these relationships. The findings of this research add into debates regarding the association of HPWS with employee outcomes where the results of previous studies are not consistent. This study contributed by empirically testing cross-level proposed model linking manager-HPWS, affective commitment, service performance and service oriented OCB in banking sector operating in Punjab, Pakistan. In particular, the results indicated that HPWS as implemented by branch managers is directly linked with employee service related behaviors (i.e. service performance and service oriented OCB). Along with this, the findings also highlighted that affective commitment mediated the relationship of implemented HPWS with service performance and service oriented OCB. Study results revealed that effectively implemented HPWS by line managers provides a positive environment which enhances service related behaviors of the front line employees. Findings also highlighted that mediating role of affective commitment which transmits the effects of implemented HPWS to service related behaviors.

### 7.1 Limitations and Future Research Directions

Like all other scientific investigations, this research also has some limitations that provide avenues for research in future. First, causality inferences should be drawn with cautions because of the cross-sectional design of this research. Therefore, future studies are required to be conducted with longitudinal research design to confirm the causal relationship among the variables of the study. Next, future researchers are required to conduct similar research studies in various other cultural and industrial contexts to verify the findings of the study in different contexts and settings. Furthermore, future researchers are required to use different sources to obtain data to deal with common method bias issue. Moreover, future researchers could also investigate the mediating mechanisms linking the HPWS and employee outcomes relationship by using different variables and theoretical perspectives such as psychological climate, employee empowerment theory, and psychological capital and so on to explore the “black box” issue in SHRM literature. In the last, using multilevel approach, future researchers have more liberty to investigate HPWS-performance relationship which was ignored previously due to being limited to just single level of analysis, especially in the case of Pakistan.

## REFERENCES

- Alfes, K., Shantz, A., Truss, C., & Soane, E. (2013). The link between perceived human resource management practices, engagement and employee behaviour: a moderated mediation model. *The International Journal of Human Resource Management*, 24(2), 330-351.
- Appelbaum, E., T., Bailey, T., Berg, P., & Kalleberg, A. (2000). *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*. Ithaca: ILR Press.
- Arthur, J. B. (1994). Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal*, 37(3), 670-687.

- Aryee, S., Walumbwa, F. O., Seidu, E. Y., & Otaye, L. E. (2012). Impact of high-performance work systems on individual-and branch-level performance: Test of a multilevel model of intermediate linkages. *Journal of Applied Psychology, 97*(2), 287-301.
- Becker, B. E., & Huselid, M. A. (2006). Strategic human resources management: Where do we go from here? *Journal of Management, 32*(6), 898–925.
- Becker, B. E., Huselid, M. A., Pinckus, P. S., & Spratt, M. (1997). HR as a source of shareholder value: Research and recommendations. *Human Resource Management Journal, 36*(1), 39-47.
- Bettencourt, L. A., & Brown, S. W. (1997). Customer-contact employees: Relationships among workplace fairness, job satisfaction and prosocial service behaviors. *Journal of Retailing, 73*(1), 39-61.
- Bettencourt, L. A., Gwinner, K. P., & Meuter, M. L. (2001). A comparison of attitude, personality, and knowledge predictions of service-oriented organizational citizenship behaviours. *Journal of Applied Psychology, 86*(1), 29-41.
- Blau, P. (1964). *Exchange and power in social life*. New York, NY: Wiley.
- Borman, W. C., & Motowidlo, S. M. (1993). *Expanding the criterion domain to include elements of contextual performance*. Personnel Selection in Organizations; San Francisco: Jossey-Bass, 71-98.
- 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), 203–221.
- Bowen, D. E., & Schneider, B. (1988). Services marketing and management: Implications for organizational behavior. *Research in Organizational Behavior, 10*, 43–80.
- Boxall, P., Guthrie, J. P., & Paauwe, J. (2016). Editorial introduction: Progressing our understanding of the mediating variables linking HRM, employee well-being and organisational performance, *Human Resource Management Journal, 26*(2), 103–111.
- Boxall, P., & Macky, K. (2014). High-involvement work processes, work intensification and employee well-being. *Work, Employment and Society, 28*(6), 963–984.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models*: 136-162. Thousand Oaks, CA: SAGE Publications.
- Bryk, A. S., & Raudenbush, S. W. (1992). *Hierarchical linear models: Applications and data analysis methods*. Newbury Park, CA: SAGE Publications.
- Chang, P. C., & Chen, S. J. (2011). Crossing the level of employee's performance: HPWS, affective commitment, human capital, and employee job performance in professional service organizations. *The International Journal of Human Resource Management, 22*(4), 883-901.
- Chuang, C.-H., Jackson, S. E., & Jiang, Y. (2013). Can knowledge-intensive teamwork be managed? Examining the roles of HRM systems, leadership, and tacit knowledge. *Journal of Management, 42*(2), 524–554.

- Chuang, C.-H., & Liao, H. (2010). Strategic human resource management in service context: Taking care of business by taking care of employees and customers. *Personnel Psychology*, 63(1), 153–196.
- Combs, J., Liu, Y., 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.
- Comrey, A. L. (1978). Common methodological problems in factor analytic studies. *Journal of Consulting and Clinical Psychology*, 46(4), 648-659.
- Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*, 39(4), 949-969.
- 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.
- Datta, D. K., Guthrie, J. P., & Wright, P. M. (2005). Human resource management and labor productivity: does industry matter? *Academy of Management Journal*, 48(1), 135-145.
- Erdogan, B., & Enders, J. (2007). Support from the Supervisors' Perceived Organizational Support as a Moderator of Leader–Member Exchange to Satisfaction and Performance Relationships. *Journal of Applied Psychology*, 92(2), 321–330.
- Heffernan, M., & Dundon, T. (2016). Cross-level effects of high-performance work systems (HPWS) and employee well-being: the mediating effect of organisational justice. *Human Resource Management Journal*, 26(2), 211-231.
- Gong, Y., Law, K. S., Chang, S., & Xin, K. R. (2009). Human resources management and firm performance: The differential role of managerial affective and continuance commitment. *Journal of Applied Psychology*, 94(1), 263-275.
- GONG, Y. & CHANG, S. (2008). How do high performance work systems (HPWS) affect collective organizational citizenship behavior (OCB)? A collective social exchange perspective. In *Academy of Management Proceedings* (pp. 1–7).
- Gouldner, A. (1960). The Norm of Reciprocity: A Preliminary Statement. *American Sociological Review*, 25, 161–178.
- Guest, D. E. (2011). Human resource management and performance: Still searching for some answers. *Human Resource Management Journal*, 21(1), 3–13.
- Guest, D. E. (1997). Human resource management and performance: a review and research agenda. *International Journal of Human Resource Management*, 8(3), 263–276.
- Guthrie, J. P. (2001). High-involvement work practices, turnover, and productivity: Evidence from New Zealand. *Academy of Management Journal*, 44(1), 180-190.
- Hair, J. F., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate Data Analysis*, 7th ed. Englewood Cliffs, NJ: Prentice Hall.
- Hall, R. L., Snell, A. F., & Foust, M. S. (1999). Item parceling strategies in SEM: Investigating the subtle effects of un-modeled secondary constructs. *Organizational Research Methods*, 2(3), 233-256.

- Hox, J. J. (2010). *Multilevel analysis: Techniques and applications*. New York: Routledge.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55.
- Huang, Y., Ma, Z., & Meng, Y. (2017). High performance work systems and employee engagement: empirical evidence from China. *Asia Pacific Journal of Human Resources*, [Early Online], DOI: 10.1111/1744-7941.12140.
- Huselid, M. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), 635-672.
- Imran, R., & Fatima, A. (2015). Achieving Service Performance through High Performance Work System: Psychological Empowerment as Mediator. *Advanced Science Letters*, 21(5), 1173-1175.
- Jiang, K., Takeuchi, R., & Lepak, D. P. (2013). Where do we go from here? New perspectives on the Black Box in strategic human resource management research. *Journal of Management Studies*, 50, 1448–1480.
- Kehoe, R. R., & Wright, P. M. (2013). The impact of high-performance human resource practices on employees' attitudes and behaviors. *Journal of Management*, 39(2), 366–391.
- Khilji, S.E., & Wang, X. (2006). “Intended” and “Implemented” HRM: The missing linchpin in strategic human resource management research. *International Journal of Human Resource Management*, 17(7), 1171–1189.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd Ed.). New York: The Guilford Press.
- Kuvaas, B. (2008). An exploration of how the employee–organization relationship affects the linkage between perception of developmental human resource practices and employee outcomes. *Journal of Management Studies*, 45(1), 1–25.
- Liao, H., & Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal*, 47(1), 41–58.
- 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.
- Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, 43(4), 738–748.
- Mathieu, J. E., & Taylor, S. R. (2007). A framework for testing meso-mediational relationships in organizational behavior. *Journal of Organizational Behavior*, 28(2), 141–172.

- Messersmith, J. G., Patel, P. C., Lepak, D. P., & Gould-Williams, J. S. (2011). Unlocking the black box: Exploring the link between high-performance work systems and performance. *Journal of Applied Psychology, 96*(6), 1105-1118.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace*. Thousand Oaks, CA: Sage.
- Morrison, E. W. (1996). Organizational citizenship behavior as a critical link between HRM practices and service quality. *Human Resource Management, 35*(4), 493–512.
- Nishii, L.H., Lepak, D.P., & Schneider, B. (2008). Employee Attributions of the “Why” of HR Practices: Their Effects on Employee Attitudes and Behaviors, and Customer Satisfaction. *Personnel Psychology, 61*(3), 503–545.
- Nishii, L. H., & Wright, P. M. (2007). *Variability within Organizations: Implications for Strategic Human Management* (CAHRS Working Paper #07–02). Ithaca, NY: Cornell University. [Online] Available: <http://digitalcommons.ilr.cornell.edu/cahrswp/467> (November 29<sup>th</sup>, 2016).
- Nunnally, J. C. (1978), *Psychometric Theory*, New York: McGraw-Hill.
- Ostroff, C., & Bowen, D. E. (2000). Moving HR to a higher level: HR practices and organizational effectiveness. In K. J. Klein, and S. W. Kozlowski (Eds.), *Multilevel Theory, Research, and Methods in Organizations*, 211-266. San Francisco: Jossey-Bass, [Edited Book].
- Pak, J., & Kim, S. (2016). Team Manager’s Implementation, High Performance Work Systems Intensity, and Performance: A Multilevel Investigation. *Journal of Management*, [Early Online], DOI 0149206316646829.
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing, 67*(4), 420–450.
- Park, J. W., Robertson, R., & Wu, C. L. (2006). Modelling the impact of airline service quality and marketing variables on passengers’ future behavioural intentions. *Transportation Planning and Technology, 29*(5), 359–381.
- Podsakoff, P. M., Ahearne, M., & MacKenzie, S. B. (1997). Organizational citizenship behavior and quantity and quality of work group performance. *Journal of Applied Psychology, 82*(2), 262–270.
- Posthuma, R. A., Campion, M. C., Masimova, M., & Campion, M. A. (2013). A high performance work practices taxonomy: Integrating the literature and directing future research. *Journal of Management, 39*(5), 1184-1220.
- Purcell, J., & Hutchinson, S. (2007). Front-Line Managers as Agents in the HRM–Performance Causal Chain: Theory, Analysis and Evidence. *Human Resource Management Journal, 17*(1), 3-20.
- Raineri, A. (2016). Linking human resources practices with performance: the simultaneous mediation of collective affective commitment and human capital. *The International Journal of Human Resource Management, 15*(1), 1-30.
- Riaz, S. (2016). High Performance Work Systems and Organizational Performance: An Empirical Study on Manufacturing and Service Organizations in Pakistan. *Public Organization Review, 16*(4), 421-442.

- Snape, E., & Redman, T. (2010). HRM practices, organizational citizenship behaviour, and performance: A multi-level analysis. *Journal of Management Studies*, 47(7), 1219-1247.
- Subramony, M., & Pugh, S. D. (2015). Services Management Research Review, Integration, and Future Directions. *Journal of Management*, 41(1), 349–373.
- Sun, L., Aryee, S., & Law, K. S. (2007). High-performance human resource practices, citizenship behavior, and organizational performance: A relational perspective. *Academy of Management Journal*, 50(3), 558– 577.
- Takeuchi, R., Chen, G., & Lepak, D. P. (2009). Through the looking glass of a social system: Cross level effects of high-performance work systems on employees' attitudes. *Personnel Psychology*, 62(1), 1–29.
- Takeuchi, R., Lepak, D. P., Wang, H., & Takeuchi, K. (2007). An Empirical Examination of the Mechanisms Mediating Between High-Performance Work Systems and the Performance of Japanese Organizations. *Journal of Applied Psychology*, 92(4), 1069–1083.
- Van De Voorde, K., Paauwe, J., & Van Veldhoven, M. (2012). Employee Well-being and the HRM-Organizational Performance Relationship: A Review of Quantitative Studies. *International Journal of Management Reviews*, 14(4), 391–407.
- Wayne, S.J., Shore, L.M., & Liden, R.L. (1997). Perceived Organizational Support and Leader– Member Exchange: A Social Exchange Perspective. *Academy of Management Journal*, 40(1), 82–111.
- Whitman, D. S., Van Rooy, D. L., & Viswesvaran, C. (2010). Satisfaction, citizenship behaviors, and performance in work units: A meta-analysis of collective construct relations. *Personnel Psychology*, 63(1), 41–81.
- Wright, P. M., & Gardner, T. M. (2003). The human resource–firm performance relationship: Methodological and theoretical challenges. In D. Holman, T. D. Wall, C. W. Clegg, P. Sparrow, P. and A. Howard (Eds.). *The new workplace: A guide to the human impact of modern working practices*. Chichester: Wiley.
- Wright, P. M., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*, 18(2), 295-320.
- Wright, P., & Nishii, L. (2013). Strategic HRM and Organizational Behaviour: Integrating Multiple Levels of Analysis. In D. E. Guest, J. Paauwe, and P. M. Wright (Eds.), *HRM and Performance: Achievements and Challenges*, Chichester, UK: Wiley, pp.97–110.
- Youndt, M. A., Snell, S. A., Dean, J. W., Jr., & Lepak, D. P. (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of Management Journal*, 39(4), 836-866.
- Yung Chou, S., & Lopez-Rodriguez, E. (2013). An empirical examination of service-oriented organizational citizenship behavior: The roles of justice perceptions and manifest needs. *Managing Service Quality*, 23(6), 474-494.
- Zhang, Z., Zyphur, M. J., & Preacher, K. J. (2009). Testing multilevel mediation using hierarchical linear models problems and solutions. *Organizational Research Methods*, 12(4), 695–719.

**APPENDIX-I**  
**List of Banks Included in the Study**

Sr. No.	Name of Bank
<b>A. Public Sector Banks</b>	
1	First Women Bank Limited
2	National Bank of Pakistan
3	Sind Bank
4	Bank of Khyber
5	Bank of Punjab
<b>B. Private Banks</b>	
6	Allied Bank
7	Askari Bank
8	Bank Alfalah
9	Bank Al Habib
10	Faysal Bank
11	Habib Bank
12	Habib Metropolitan Bank
13	JS Bank
14	MCB Bank
15	NIB Bank
16	Samba Bank
17	Silk Bank
18	Soneri Bank
19	Standard Chartered Bank
20	Summit Bank
21	United Bank
<b>C. Islamic Banks</b>	
22	Al-Baraka Bank
23	Bank Islami
24	Burj Bank
25	Dubai Islamic Bank
26	Meezan Bank
<b>D. Specialized Banks</b>	
27	Industrial Development Bank Limited
28	SME Bank Limited
29	The Punjab Provincial Cooperative Bank
30	Zarai Taraqiati Bank

Note. Above list follows the categorization made by the State Bank of Pakistan.