

Work Practices to Augment Employees' Performance Oriented Behaviors?

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Abstract

We examine the relationship between high-performance work practices and employee performance mediated by employee involvement, motivation, and satisfaction. For this purpose, we collected data on adapted scales from 292 heads of departments of various public and private sector institutions from Pakistan. The results indicated a positive and significant impact of high-performance work practices on employee involvement, motivation, satisfaction, and performance. Besides, results also supported the mediation of employee involvement and motivation. However, the relationship between employee satisfaction and performance was not found significant and similarly, its mediation was also not established as we had expected. The study is the first of its kind, where a composite model of high-performance work practices was tested for its employee-related outcomes. Moreover, the mediation of employee involvement and employee motivation in the relationship between high-performance work practices and employee performance is also a noteworthy contribution of the current research in the Pakistani context. The results are generalizable to public and private sector higher education institutions of Pakistan but can also be used in other organizations with caution.

Keywords: High-Performance Work Practices (HPWPs); Employee involvement, Employee motivation; Employee Performance; Employee Satisfaction; Higher Education Institutions

JEL Code: M12, J24

1 Introduction

In the contemporary business world, developed, motivated, engaged and committed employees of an organization are a unique source of competitive advantage (Kryscynski, Coff & Campbell, 2020; Porter, 1998). Therefore, the majority of research and practices revolve around activities to develop and maintain this precious capital to achieve organizational effectiveness (Dayarathna, Dowling & Bartram, 2019). Modern organizations have realized that effective human resource strategies are instrumental in making employees satisfied in their workplace. One of these strategies is a bundle of critical human resource practices known as High-Performance Work Practices (HPWPs). The main idea behind the phenomenon is that multiple HRM practices should be used in logical bundles to produce a synergistic effect on performance at the

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individual and organizational levels (Beltran-Martin & Bou-Llusar, 2018; Ho & Kuvass, 2020). The composition of these bundles varies from organization to organization, depending upon the type and requirement of the entity. However, the most commonly used bundles include practices like recruitment & selection, performance evaluation, compensation and benefits, training & development, participative decision making, employee retention, etc.

Previous literature has provided evidence that an effective bundle of HPWPs can enhance organizational effectiveness and productivity (Alatailat, Elrehail & Emeagwali, 2019; Liu, Liu & Li, 2006; Obeidat et al., 2016; Ogbonnaya & Valizade, 2015). Research has also substantiated that HPWPs enhance employee performance (Safavi & Karatepe, 2018; Garg, 2019; Johnson, 2013; Long, Ismail, & Amin, 2012; McCurdy, 2015; Sparrow & Otaye-Ebede, 2014;). However, the process through which such practices establish their significance for employees in a specific organization remains unexplored. Especially, it has not been studied in the context of higher education institutions (HEIs) of Pakistan. The academic administrators of these organizations face day-to-day issues about faculty involvement, motivation, and performance and there is always a need to identify a bundle of HR practices that may produce a collaborative effect towards effective performance (Naeem et al., 2019). Therefore, this paper attempts to find out a specific bundle of HPWPs for these institutions and establishes its linkages with multiple intermediate employees' related outcomes (motivation, involvement, engagement) that may lead to enhanced employee performance.

Previous studies have only focused on the impact of HPWPs and HR strategies on employee satisfaction or employee motivation (Tohidi, 2011). Researchers have also studied the direct impact of HR strategies on employee performance without any mediating role of intermediate outcomes (Katou & Budhwar, 2010). There is a significant amount of empirical research to support the phenomenon that effective HRM systems have a significant impact on organizational performance (Han et al., 2019; Carmeli & Tishler, 2004; Datta, Guthrie, & Wright, 2005; Huselid, 1995; El-Ghalayini, 2017; Dastmalchian et al., 2020). Even the extant literature endorses that performance appraisal, compensations and benefits, and training and development activities have a significant impact on organizational performance. Especially from the perspective of HPWPs, the researchers have mostly paid more attention to their link with organizational outcomes like organizational effectiveness and performance (Guthrie et al., 2009; Verburg et al., 2018). However, as per our best knowledge, there is little research on the investigation of linkages between HPWPs and employees' performance, especially through mediating effects of motivation, involvement, and employee satisfaction, which remains unexplored as a composite model till today.

Although some studies have considered single or dual level mediation effects of employees related outcomes leading to organizational performance (Ahmed et al., 2019), yet did not consider the interdependencies among employees' related events within the same organization and therefore fail to handle sources of errors more

rigorously (Shen & Zhang, 2019). Even though researchers acknowledge the importance of multilevel mediation analysis as a viable technique for addressing such errors (MacKinnon, 2008; Preacher, Zyphur, & Zhang, 2010), none have taken it as a composite model especially while studying the effectiveness of HPWPs for employee performance with three mediators as we have done in the current study.

The main feature of HPWPs is the concept of HRM bundling (Beltran-Martin et al., 2009; Gahan et al., 2020) but it cannot be implemented consistently as a single solution. It is drawn on the alignment of HRM activities into organization-specific internally consistent systems that support each other or creates context-specific “internal fit” (Delaney & Huselid, 1996). In other words, it creates a synergistic effect when individual HRM practices are used in coherent bundles and these complement each other through their mutually supportive properties (Macdufflie, 1995). However, there is little consensus among researchers as to what HRM practices should be included in a typical HPWPs bundle. Since it varies from context to context, therefore, researchers have suggested further investigation in this regard (Beltran-Martin & Bou-Llusar, 2018; Jiang et al., 2012). The current research is an attempt in the same direction.

Posthuma et al. (2013) support the concept of equifinality for HPWPs and maintain that it is an open system and the combination of required practices can be altered based on the needs and requirements of the organization. Delaney and Huselid (1996) had also suggested multiple possible combinations of HPWPs to achieve desired objectives for an organization. The characteristic of equifinality for combining HPWPs adds a significant amount of complexity for researchers and practitioners in this field. Especially from management and practitioner’s perspective, it becomes a challenging decision to understand, implement, or replicate the practices of other successful firms. At the same time, it provides a scope for the researchers to include and study multiple combinations of HPWPs for different organizations as it can be a unique source of sustained competitive advantage (Grobler & De Bruyn, 2018; Lepak et al., 2006).

The current study was designed to identify an effective bundle of HPWPs to enhance employee performance in HEIs of Pakistan. Specific objectives were as follows:

1. To find out the impact of a bundle of HPWPs on employee motivation, involvement, satisfaction, and performance.
2. To establish the path between a bundle of HPWPs and employee performance through employee satisfaction, motivation, and involvement.
3. To find out as to which of the mediators from amongst employee satisfaction, motivation and involvement best fits the model.

The unique combination of high-performance work practices (HPWPs) identified for the HEIs of Pakistan include items about multiple practices like recruitment and selection, performance appraisal, safety environment, employee participation, communication, teamwork, training and development, and rewards/remuneration, etc.

These are based on recommendations from the studies of Posthuma et al. (2013) and Murphy et al. (2017) mainly for the service industry. The suggestions from the study of Mohamed, Mohamad, and Abdullah (2018) for HEIs of Malaysia were also considered while developing the model for the current study. Additionally, the mediating factors of employee motivation, involvement, and satisfaction were also included in the model.

2 Related literature

Employee performance is measured against the performance standards set by the organization (Audenaert et al., 2019). Earlier research on the productivity of workers has reflected that employees who are motivated, involved, and satisfied with their job will have higher job performance in comparison with those who lack these attributes (Manzoor et al., 2019). In the same way, Long et al. (2012) suggest the HR managers to have more focus on personnel issues and synchronize these with business strategies. They further recommend that the managers should give due importance to the human resource development (HRD) activities that enhance employees' motivation, efficiency, and effectiveness at work.

A good blend of HPWPs such as career development, coaching, performance management and development, systematic employee training and development, organizational development, succession planning, and mentoring are very important to ensure employees' manual dexterity at work. This enhances employees' liking for the work, increases their involvement, motivation, and satisfaction. These employees tend to perform better at their workplace both in terms of quantity and quality of work (Dubbel, Demoeruti & Rispen, 2019; Huselid, 1995; Gheitani et al., 2019). Both equity theory (Adams, 1965) and Herzberg's motivation-hygiene theory (1966) provide a useful explanation for the relationship between high-performance work systems and employees' motivation as well as satisfaction with their work. Hygiene theory discusses employee satisfaction and dissatisfaction factors, which takes motivation theories to a whole new level. According to this theory, employee motivation increases due to performance appraisal and training and development. The factors for satisfaction are achievement, responsibility, recognition, advancement, the work itself and growth. The dissatisfaction factors are company policies, relationships with supervisor and peers, supervision, work conditions, status, salary and security (Habib, Awan & Sahibzada, 2018). When it comes to measuring intrinsic and extrinsic rewards, the suitably applicable theory is the equity theory, which discusses the costs and benefits, according to a person's perception about a certain factor or element.

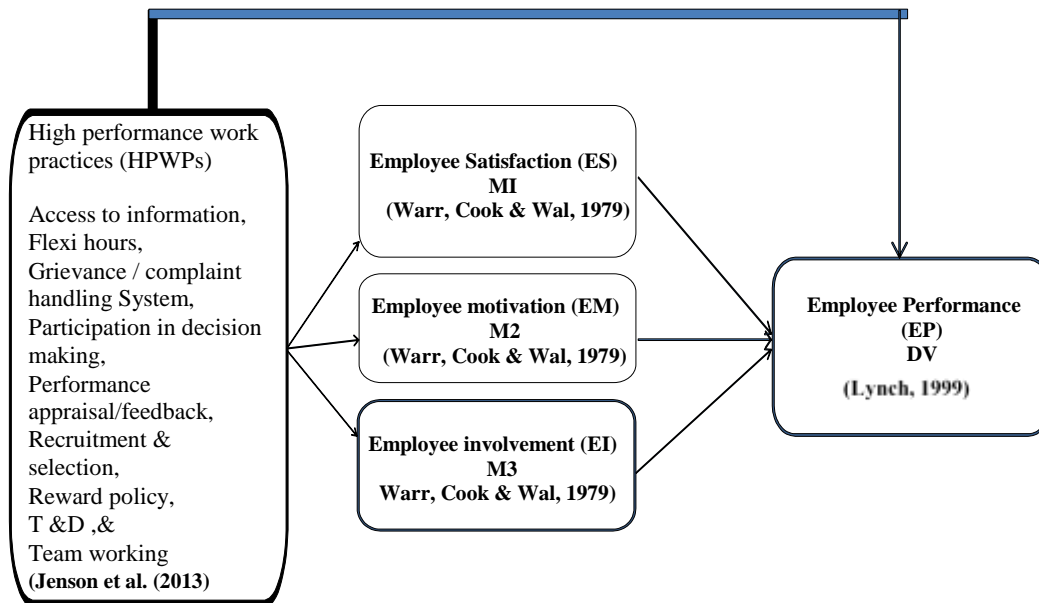
Equity theory discusses the relative and absolute terms, where an employee initially compares his rewards with his/her performance and then he/she compares that analysis with colleagues, who get rewards against their performance (Carrell & Ditttrich, 1978). It is mainly about the perception of people about themselves and other colleagues, who are working under the same conditions. Equity theory expresses the perception of people about their surroundings, whereas hygiene theory mainly discusses the external factors that cause motivation. Employee motivation and employee satisfaction are related and important to each other. Motivation is a "positive emotional condition or

pleasurable state when a person is appraised correctly in terms of his job and job experiences". Positive emotional responses to the job yield employee satisfaction (Gadiraju & Demartini, 2019). Evidence suggests that HPWPs such as empowerment, training, and rewards increase employees' skills, knowledge, abilities, and encourage them to achieve a higher level of productivity. When those practices are used collectively, they support and strengthen each other (Garg, Punia & Jain, 2019). Liden, Wayne, and Sparrowe (2000) further describe the process that when employees feel that their work can influence outcomes that affect their organization and that their work is meaningful, they tend to feel more involved and therefore gain a sense of satisfaction with their job.

The important practices like training, involvement in decision making, rewards, promotions, etc. motivate employees and enable them to get satisfied with their jobs and perform better in the organization which improves their performance (Asaari, Desa & Subramaniam, 2019). Based on the literature review, the current study has adopted a bundle of HPWPs as recommended by Jenson, Patel, and Messersmith (2013) and previously designed and studied by Datta et al. (2005). The scale designed for these studies contains items relating to multiple HRM practices including recruitment and selection, performance evaluation practices, compensation and benefits, participative decision making, employee turnover, employee retention, and training and development.

2.1 Research Hypotheses

Effective implementation of HPWPs comprised tailor-made strategies for performance evaluation, compensation and benefits, training and development, employee involvement, participative decision making, and employee retention that can have a significantly positive effect on employee performance. Many researchers (Huselid, 1995; Jiang et al., 2012; Johnson, 2013; Kandula, 2010a, 2010b; Katou & Budhwar, 2010; Nohria, Groysberg, & Lee, 2008; Sparrow & Otake-Ebede, 2014; Tohidi, 2011; Urea & Muscalu, 2012; Brinck, Otten & Hauff, 2019) show agreement that HPWPs are linked with employee satisfaction. Herzberg's motivation-hygiene theory clarifies this link in detail while explaining as to which factors lead to enhanced employee satisfaction and which are essentially required to avoid employees' dissatisfaction at work. These factors were later combined to form a bundle of HPWPs (Zirar, Trusson & Choudhary, 2020; Kandualala, 2010a; Sparrow & Otake-Ebede, 2014; Naeemet al., 2019; Garg et al., 2019). On the other hand, literature also provides support that satisfied employees perform better at work in comparison with dissatisfied people (Mahmood et al., 2019). Although few researchers argue that satisfaction does not necessarily lead to significant improvement in performance (Greene, 1972; Organ, 1977), still majority favors the linkage in the same direction (Gu & Siu, 2009). Hence it can be hypothesized that:



Note: IV: Independent variable, M1: Mediator 1, M2: Mediator 2, M3: Mediator 3; DV: Dependent Variable

H1. Utilization of HPWPs comprised of performance evaluation, compensation and benefits, training and development, participative decision making, employee retention as a bundle, are positively related to employee performance in HEIs of Pakistan.

H2. Utilization of HPWPs comprised of performance evaluation, compensation and benefits, training and development, participative decision making, and employee retention as a bundle, are positively related to employee satisfaction in HEIs of Pakistan.

H3. Employee satisfaction mediates the relationship between HPWPs bundle and employee performance in HEIs of Pakistan.

Employee involvement plays a vital role to satisfy an employee of an organization. Employee involvement gives a sense of pride and belonging to the employees with the organization. Employees feel that people in ownership and management positions value them as a significant contributor to the team's success. When people feel valued, they will usually raise their level of effort and commitment to ensure the department's or company's success. Locke and Schweiger (1979a) and Wagner (1994) state that employee involvement is a tool through which each employee shares his/her knowledge within the organization without any discrimination. Furthermore, Wagner (1994) defines that it is the management of participation that involves all the employees and knowledge is shared that enhances the decision-making power as well as willingness of problem solving. Therefore, it is hypothesized that:

H4. HPWPs comprised of performance evaluation, compensation and benefits, training and development, participative decision making, and employee retention as a bundle, have a positive effect on job involvement of employees at work in HEIs of Pakistan.

H5. *Employee involvement mediates the relationship between HPWPs bundle and employee performance.*

Researchers have an agreement that HPWPs are effective tools to motivate the employees in an organization (Ogbonnaya et al., 2018; Nadeem & Rahat, 2020; Jiang et al., 2012; Johnson, 2013; Sparrow & Otake-Ebede, 2014;). Researchers have also found positive relationships among various dimensions of HPWPs and employee motivation as well as performance (Odiaka & Chang, 2019; Kandula, 2010a, 2010b; Sparrow & Otake-Ebede, 2014). It has been found that training and development enhance the employees' competence, which ultimately encourages and motivates them to perform better at the workplace. Similarly, the equitable and effective performance appraisals motivate employees intrinsically and extrinsically to perform better, especially when these are linked with rewards and benefits (Alsuwaidi et al., 2020; Goel, 2013; Long et al., 2012; Aydın & Tiryaki, 2018; Idowu, 2017). Recruitment and selection of employees also provide an opportunity for the organization to present itself in a favorable light (Ekwoaba et al., 2015). Employees of a firm are motivated if they have confidence that the organization cares for them and treats them in a respectable manner. High-performance work practices build employees' trust in the organization and management and motivate them to perform better at the workplace. Therefore, the current study has hypothesized motivation as another useful mediator in the relationship between selected HPWPs and employee performance.

H6. HPWPs comprised of performance evaluation, compensation, and benefits, training and development, participative decision making and, employee retention as a bundle, are positively related with employees' motivation in HEIs of Pakistan.

H7. Employee motivation mediates the relationship between HPWPs bundle and employee performance in HEIs of Pakistan.

3 Research Methodology

The current study used a survey technique for the collection of data through a questionnaire adapted from different studies for each dimension. A list of public and private sector universities of Pakistan was obtained from the official website (www.hec.gov.pk) of the higher education commission (HEC) of Pakistan. There were 206 institutions (listed in the directory of which every 7th university was selected randomly for participation in the research. The HR or administrative department heads of each selected university were requested telephonically for cooperation in the research survey and were asked to get the questionnaire filled by HoDs of each department in their institution. Being heads of the departments, they remain actively involved in all administrative activities pertaining to their departmental faculty including recruitment

and selection. They not only indicate the HR needs of their department but also made part of the selection board and their consent has a due weightage at the time of selection. HoDs are the individuals who ensure all other management activities after taking the faculty members onboard and are more knowledgeable about day-to-day HR needs within the department. Moreover, they are the best judge to indicate the level of their faculty involvement, motivation, satisfaction, and performance in their teaching activities. Another reason for selecting HoDs as a sample for the current study was their in-depth knowledge of research. Their active participation in the whole process helped researchers to obtain realistic data. Therefore, the instrument chosen for the study was specifically developed for department-level HPWPs, as designed by Jenson et al. (2013). After getting their consent, they were sent a formal request letter along with research questionnaires, separately enveloped for each department. On the whole, 29 universities were contacted for participation. Out of these, 25 (14 private & 11 public sector universities) gave their consent and were approached for formal data collection through self-administered or online data collection techniques.

The sample for the current study was comprised of HoDs of various departments of public (11) and private sector (14) universities of Pakistan. The majority of the respondents were male with a rate of 76% of the overall sample. The educational level of the respondents was PhD (93%) or in very few cases MPhil, but not less than that in any case. The research participants belonged to various age groups starting from 31-35 (9%) to 51 and above (5%). The highest number of participants (36%) belonged to 41-45 age group. Two groups of HoDs (32 and 18) were in the age bracket of 36-40 and 41-45 years respectively. The sample was drawn from across the country and the representation of each province was ensured. Overall, 12% of the respondents belonged to the institutions from Sindh, 5% from Balochistan, 17% from KPK, 21% from federal capital Islamabad and the remaining 45% from Punjab. 46% of respondents were from the public and 54% were from private sector institutions.

3.1 Measurement

Multiple scales were used to measure the response for each dimension of the study. The independent variable HPWPs was measured with 21 items tool developed by Datta et al. (2005). The same tool and scale was used by Jenson et al. (2013) to measure the utilization of HPWPs at the department level in local government authorities of Wales. Jenson et al. (2013) indicated a reliability value as 0.81 for this bundle. The response was measured against a five-point Likert scale where 1 represented strong disagreement and 5 strong agreement. Sample items included "To what extent do you agree or disagree that your department has one or more employment tests prior to hiring (e.g. personality, ability tests), etc. Three mediators employee satisfaction, employee motivation, and employee involvement were measured through 16, 06 and 06 items tools respectively adapted from Warr, Cook and Wal (1979). Sample items included, "I like to look back on the day's work with a sense of a job well done", "I get the recognition for good work", "I would soon get very bored if I had no work to do" and I take pride in doing my job as well as I can. etc. respectively. The initial reliability

(Cronbach's Alpha) values indicated by Warr et al. (1979) were 0.86, 0.82, and 0.64 respectively. Similarly, employee performance was measured by a 16 items scale adapted from the study of Lynch (1999) with Cronbach's alpha as 0.91. Sample items included "I meet formal performance requirements of the job" and "I go out of my way to help new employees" etc.

3.2 Data collection procedure

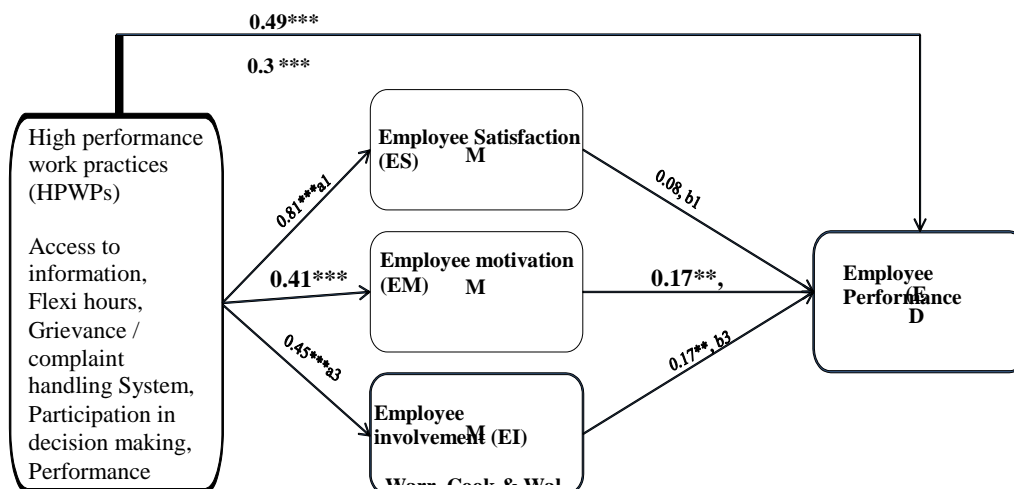
The data were collected against two separate instruments with separate cover letters, where the items of HPWPs were listed in the first questionnaire and the remaining items pertaining to employee motivation, satisfaction, involvement (mediators), and employee performance (outcome variable) were listed in the second questionnaire. Cross-sectional data were collected through self-administered and online data collection techniques. We sent a total of 635 questionnaires to the respondents out of which 245 were administered personally and 390 were sent through online methods. Overall, 303 respondents replied back, however, 292 responses were complete and properly filled, which were used for further analyses. The self-administered questionnaires were personally and through representatives were floated to the respondents at two different times to ensure the minimization of common method bias (CMB) in data collection. In some cases, respondents were approached after one or two days again for filling the second questionnaire. We had an edge in data collection as the respondents being HoDs of departments were well aware of the research processes and in most cases, they did cooperate. Therefore, 180 (73%) responses were received back through self-administered questionnaires and 123 (31.5%) through online data collection techniques. To minimize the bias, several techniques as recommended by Podsakoff, MacKenzie, and Podsakoff (2003) were used. During the face-to-face interaction between researchers and respondents, a friendly environment was created. The cover letter included several items for the identification of respondents (for example, name, email, contact information, etc.), however, these were kept optional to ensure their anonymity. Similarly, they were given the option to know the results of the research, which could help them in improving their knowledge and performance using the findings. This was done to create and maintain their interest in this activity so that they feel comfortable and may benefit from the research. Moreover, they were assured in the cover letter that the purpose of the research was purely academic and had nothing to do with the policy-making process of any institution. However, being key personnel, they had the opportunity to assess and use the results to benefit their respective institutions. Later on, the results were statistically tested to check for any significant influence of CMB using the common marker variable, which reflected a good fit to the data (CMIN/Df: 3.359, CFI: 0.909, TLI: 0.912, RMSEA: 0.066). Moreover, the differences between substantive latent variable correlations for both models (with and without common factor) varied negligibly (mean difference 0.021). These results demonstrated that the respondents were able to understand and differentiate between substantive variables and they provided data based on actual practices being carried out in their respective organizations.

4 Data analysis

The reliability and validity of the instruments were checked through Cronbach alpha in SPSS (v-21) and AMOS (v-19) respectively. Moreover, the construct validity of the instrument was determined through convergent (AVE, CR, MaxR(H)) and discriminant validity (MSV, square root of AVE) using validity master application in the statistical tools package of MS Excel 2007. Confirmatory Factor Analyses (CFA) were conducted in AMOS to ascertain the construct validity of the dimensions. The initial values of model fit indices were not satisfactory, therefore several contributory items with low factor loadings ($\lambda < 0.5$) were removed from the analyses. These included seven items from the independent variable HPWPs, five items from the mediator employee satisfaction (ES), and one item from the dependent variable employee performance (EP). Remaining items indicated good model fitness (CMIN: 3980.72; df: 1257; p: 0.00 < 0.001; CMIN/df: 3.167 < 5; IFI : 0.911 > 0.9; TLI: 0.901 > 0.9; CFI: 0.911 > 0.9; RMSEA: 0.061 < 0.08) and factor loadings above 0.55 for each item. All other analyses and computations were conducted on the remaining 52 items. CFA Table, showing items of the instrument, is given at annexure A.

As shown in Table-I, the reliability analyses of the data indicate satisfactory values, with the lowest for employee satisfaction as 0.924. All of these are much above the threshold value (i.e. $\alpha > 0.70$) indicated by Hair, Black, Babin, and Anderson (2010). The values of CR (Min: 0.926, Max: 0.988) were found greater than the threshold value of 0.70, hence, the data qualified the conditions for reliability. Similarly, the value of AVE for each variable was found as more than the required value of 0.5. Moreover, the value of CR was greater than AVE (Min: 0.596, Max: 0.844) as required for the convergent validity of the data (Byrne, 2010). In the same way, the maximum reliability of the highest order MaxR(H) for each dimension is much higher than the threshold value of 0.80 and supports for the convergent validity of all the factors included in the measurement model (Hancock & Mueller, 2001). The values of MSV (Min: 0.136, Max: 0.396) were also smaller than AVE and conform to the conditions for discriminant validity for the data. Another criterion for testing the discriminant validity is the square root of AVE shown in bold faces (Table – I), and the values are greater than the rest of the inter construct correlations in each case. Hence, the discriminant validity between the three latent constructs is also established (Fornell & Larcker, 1981). The correlation values also lie within the acceptable range and in no case higher than 0.8 to doubt for a significant multicollinearity among the variables. These results ascertain the validity of the instrument and data collected for the current study.

Figure 2
Mediation Model



* $p < .01$. *** $p < .001$

Not IV: Independent variable, M1: Mediator 1, M2: Mediator 2, M3: Mediator 3; DV:

Table 1 – Reliability and validity analyses (N=292)

	Mean	Cronbach's Alpha	CR	AVE	MSV	Max R(H)	HPWPs	ES	EM	EI	EP
HPWPs	4.16	0.965	0.954	0.596	0.194	0.984	0.772				
ES	4.11	0.924	0.965	0.671	0.194	0.982	0.440**	0.819			
EM	3.88	0.934	0.926	0.679	0.396	0.957	0.321**	0.380**	0.824		
EI	3.76	0.933	0.934	0.703	0.396	0.953	0.340**	0.359**	0.629**	0.838	
EP	4.11	0.942	0.988	0.844	0.136	0.992	0.363**	0.369**	0.286**	0.320**	0.919

*** $p < .001$

Table 2 - Regression Analysis by Process Macro showing employee satisfaction (ES), employee motivation (EM) and employee involvement (EI) as mediators between High performance work practices (HPWPs) and employee performance (EP) (N=292)

Paths	Coefficients	SE	T
Path a1 (IV-M1)	.81***	.037	21.62
Path a2 (IV-M2)	.41***	.053	7.79
Path a3 ((IV-M3)	.45***	.054	8.25
Path b1 (M1-DV)	.07***	.085	0.89

Path b2 (M2-DV)	.17**	.059	2.94	
Path b3 (M3-DV)	.17***	.056	3.06	
Path c (IV-DV without mediators)	.45***	.054	8.25	
Path c' (IV-DV with mediators)	.33***	.088	3.81	
Indirect Effects of IV on DV Paths	Effect	Boot SE	BootLLCI	BootULCI
Total indirect effect of IV on DV	.1129	.0692	.0738	.2853
ES (M1)	.0617	.0859	-.1186	.2200
EM (M2)	.0723	.0371	.0133	.1600
EI (M3)	.0705	.0344	.0169	.154
Normal Theory Test Paths	Effect	SE	Z	
ES	.0617	.0691	0.89	
EM	.0723**	.0264	2.74	
EI	.0705**	.0252	2.79	
p < .01. *p < .001				
Notes: IV: Independent variable (HPWPs), M1: Mediator 1(Employee satisfaction – ES), M2: Mediator 2 (Employee motivation – EM), M3: Mediator 3 (Employee involvement – EI); DV: Dependent Variable (Employee performance – EP)				

Total effect model establishes path c for the study which is also significant (HPWP-EP: $b = 0.4481$, $t = 8.2515$, $p < 0.001$). This is the relationship between independent and dependent variables without mediators and is required to be significant as per the third condition for mediation analysis. The direct model or c' is the relationship between HPWPs and EP through mediators. In the current study, path c' remains significant even after inclusion of mediators ($b = 0.03352$, $t = 3.8098$, $p < 0.05$) however the value is lesser than path c, which indicates complementary partial mediation (Zhao, Lynch, & Che, 2010) of the two mediators (EM and EI) in the relationship between HPWPs and EP. The indirect effect is the difference between total and direct effect and indicates the exact mediation size, which is also significant with positive bootstrapping values at both upper and lower class indices ($c - c' = 0.1129$, $\text{BootLLCI} = 0.0976$, $\text{BootULCI} = 0.2853$). The individual effects of each mediator were also significant except with employee satisfaction which proved to be insignificant in the whole process ($b: 0.0617$, $\text{BootLLCI} = -.1186$, $\text{BootULCI} = 0.2200$).

To further test for the significance of the mediation effect, the normal theory test was applied. The significance of z score ($z < 0.05$) also confirmed the complimentary mediation of employee involvement (EI) and employee motivation (EM) in the relationship between HPWPs and employee performance (EP). The model presented in the current study contained three mediators, namely Employee Motivation (EM), Employee Satisfaction (ES), and Employee Involvement (EI). The result confirmed that employee motivation and involvement establish the path between HPWPs and EP. However, employee satisfaction could not qualify as a mediator in the path as the relationship between ES and EP was not significant. Therefore it is concluded that HPWPs lead to enhanced employee satisfaction but it is not necessary that satisfied

employees produce better results in terms of higher performance at work. On the other hand, there is a significantly positive relationship between the bundle of HPWPs, and employee involvement and motivation. It was also established that motivated employees, who are also well involved in their work can significantly produce higher performance.

The current study proves that employee involvement and motivation establish the path between HPWPs and employee performance. Previous research indicated similar trends in different contexts and confirmed that HPWPs enhance employee involvement (Harley, 2002; Kalleberg, 2006; Ramsay, Scholarios, & Harley, 2000) motivation (Jiang et al., 2012; Nohria et al., 2008) and their satisfaction (Karatepe, 2011; Yanadori & Jaarseld, 2014) at work. However, none of them had studied these variables collectively in a single model, especially as mediators in the context of HPWPs leading to employee performance. The current study has established the path and confirmed that employee involvement and motivation not only enhance employee performance but also significantly mediate the relationship between HPWPs and employee performance. However, the relationship between employee satisfaction and employee performance was found insignificant and hence was not proved to be a significant mediator in the path. In other words, the study has established the path between HPWPs and employee performance through employee involvement and motivation.

We adopted a set of HPWPs used by Jenson et al. (2013) for department-level assessment. Similar to our study, Jenson et al. (2013) had used a composite approach for evaluating the bundle of HPWPs. The instrument used by them and subsequently in the current study was comprised of 21 items about multiple HRM practices like recruitment and selection, information sharing, performance evaluation, feedback, rewards, team working and flexi hours, etc. Ogbonnaya, Daniels, Connolly, van Veldhoven, & Nielsen (2016) have specifically studied various clusters of high-performance work practices in the context of employee job satisfaction and other related variables and held a comparison as to which of these were more effective. However, they did not consider the intervening roles of multiple intermediate outcomes like satisfaction, involvement, and motivation leading to the overall performance of employees. Therefore, the current study has not only combined various high-performance HRM activities under one umbrella, but also explained the process through which these practices are linked with a higher level of employee performance. Hence the study effectively contributed to the performance literature and filled the gap.

We have also established that the selected set of HPWPs enhances employee motivation and involvement. We have sufficient support from previous research that multiple HRM practices, when combined as a bundle, can bring synergistic effect on employees' motivation, involvement and performance (Ho & Kuvaas, 2020; Beltrán-Martín & Bou-Llusar, 2018; Delery & Gupta, 2016; Chapman et al., 2018). When organizations provide equal opportunities to all candidates for selection on a merit basis during recruitment and promotion-related decisions,

employees feel compelled to perform better at their workplace. Similarly, an effective and regular feedback system and access to critical information in any organization not only enhances the employees' capability to perform, but also improves their motivation to do better for the organization (Amis, Mair, & Munir, 2020). In other words, the study has reaffirmed that a bundle of HPWPs enhances employee motivation and involvement at work which ultimately augment the work performance.

All the hypotheses developed for the study were proved correct except H3 as employee satisfaction was not found to significantly mediating the relationship between HPWPs and employee performance. Previously, Greene (1972) also found similar results and indicated that a higher level of employee satisfaction was not necessarily related to high performance. Highly or over satisfied employees feel more comfortable and start taking the work for granted, and non-seriously. This can lead to an insignificant improvement in their performance. In our case, although the performance has positively increased, it was not significant. Therefore, we reject H3 and conclude that although HPWPs enhance the satisfaction level of employees, satisfaction is not significantly related to employee performance. Or we conclude that employee satisfaction does not mediate the relationship between HPWPs and employee performance.

5 Implications

5.1 Theoretical Implications

The current study enhanced the validity of Herzberg's two-factor theory and established the link between HPWP and employee performance through employee motivation and involvement. Herzberg had indicated that certain factors like rewards, workplace policies, working conditions are important to keep the employees away from dissatisfaction. But these are not the factors necessarily leading to their satisfaction at work. The current study has also established that although HPWPs play a significantly positive role in enhancing employees' job satisfaction, job satisfaction does not significantly mediate the relationship between HPWPs and employee performance. On the other hand, HPWPs lead to an enhanced level of employee motivation as well as involvement that establish a significant path towards enhancing employee performance at work. These are unique findings and lay the foundation for further exploration in the future.

5.2 Managerial Implications

The research provides reasoning to the departmental managers of HEIs to adopt a bundling approach for the implementation of human resource management practices. The study has empirically proved that HR activities like access to information, flexi hours, grievance/complaint handling system, participation in decision making, performance appraisal/feedback, recruitment & selection, reward policy, training and development and team working complement each other and should be used as a bundle to achieve a synergistic effect in terms of higher involvement and motivation leading to employee performance. On the other hand, the results also suggest that although achieving job satisfaction is important for the employees of these institutions, but too

much focus on this may not have a significant effect on performance. This finding could be specific for academia as they are required to continuously grow and develop their capabilities/knowledge and meet the pace of rapid change taking place in the knowledge economy. For them, too much satisfaction may hinder their progression leading to inertia, which is not a positive indicator for their performance.

5.3 Research Implications

The study has opened several avenues for future research. The results are specifically important for future researchers to replicate the model in some other context to revalidate the findings. Especially, it needs to be checked whether employee job satisfaction plays the role of a significant mediator in the relationship between HPWPs and employee performance with a different kind of sample or set of organizations. This is also important as the job of HoDs and faculty members is very demanding in terms of continuous growth and development. Therefore, a higher level of satisfaction may not have been required for higher performance under these circumstances. Moreover, to further test the legitimacy of Herzberg's theory (1966), future research can explore individual HPWPs along with a bundle to exactly find out as to which of the practices is more linked to a specific type of outcome (involvement, satisfaction, motivation, performance). Moreover, a serial mediation mechanism can also be tested. There are possibilities that HPWPs enhance employees' involvement which fosters their motivation, further leading to satisfaction and performance. Additionally, future researchers can also identify as which practice leads to what kind of performance, for example, contextual or task performance. This will also provide reasoning for identifying the hygiene and motivational nature of certain HR practices as provided by Herzberg's two-factor theory (1966). The path between HPWPs and employee performance can also be tested through some other employee-related outcomes like engagement, retention, and commitment in the future. We focused primarily on a set of HPWPs of HEIs. However, there is a possibility that some other HRM practices like career management/ development, management training, etc., may be included in the HPWPs bundle in the future.

The study was also subject to several limitations. We collected data for this study online as we could not travel to distant locations of HEIs under study due to geographical and cost-related constraints. The data were collected from a single source, the results may have been different if we had collected responses from subordinates. Although we checked the presence of CMB through statistical measures, yet as suggested by Podsakof et al. (2003), multi-source data could have addressed the issue of CMB even better.

6 Conclusion

The study contributes to the literature and introduces a new model where HPWPs lead to a higher level of employee performance through employee involvement and motivation. The study also establishes that employee satisfaction does not significantly contribute to enhancing employee performance as far as the selected bundle of HPWPs

are concerned. Therefore, its mediation was also insignificant. The current research established complementary mediation of employee involvement and motivation and confirmed the path between high-performance work practices and employee performance in HEIs of Pakistan.

Author Contributions:

Sajid Hussain Awan, conceived the idea and wrote the introductory part of the study and reviewed the final version.

Nazia Habib conducted the analysis of the study

Shaheryar Naveed contributed towards literature and discussion of results.

Ch. Shoaib Akhtar worked on the methodology and data collection part of the study and provided the overall review of the study.

Data Availability Statement:

The data will be available upon request.

Conflict of Interest:

There is no conflict of interest.

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