

# Employing Quantile Regression for Influences of Human Resource Management on Employee Performance

Quang Linh Huynh<sup>1</sup> & Huynh Thi Thu Suong<sup>2</sup>

<sup>1</sup> Ho Chi Minh City University of Food Industry, Vietnam

<sup>2</sup> University of Finance-Marketing, Vietnam

Correspondence: Quang Linh Huynh, PhD, Ho Chi Minh City University of Food Industry, Vietnam.

Received: August 8, 2020

Accepted: October 19, 2020

Online Published: January 6, 2021

doi:10.5430/rwe.v12n1p156

URL: <https://doi.org/10.5430/rwe.v12n1p156>

## Abstract

The current study has employed the regression of quantile to explore the impacts of human resource management practices on employee performance at enterprises in business. The research data was collected in Vietnam as a developing economy. The empirical results offer a quite comprehensive picture of the causal linkages from the practices of human resource management to employee performance in emerging economies. These complex linkages have been explored at different quantiles of the conditional distribution of employee performance. The findings reveal that at different points of the conditional mean of employee performance, the effects of human resource management practices are different. The current work is helpful to researchers and business directors, especially in emerging countries like Vietnam, by providing them with a more comprehensive picture of the multifaceted links from the practices of human resource management to employee performance. Accordingly, they are able to make better business decisions on the implementation of suitable human resource management. Finally, their enterprises can achieve better employee performance, which in turn leads to superior firm performance.

**Keywords:** compensation and reward, performance appraisal, recruitment and selection, training and development, human resource management, Vietnam

## 1. Introduction

In most enterprises, there is a statement of its task, which claims that people are ones of the most precious resources (Cherif, 2020), because humans stand for a resource of competitive advantage, irrespective of whoever they are or whatever they are in charge of (Tabouli, 2016; Kerdpitak & Jermstiparsert, 2020). Hence, at the time the development of technology is incongruent, it is only the resource of human, which likely plays an imperative role in the growth of all enterprises. Able workers can facilitate customer satisfaction, and loyalty to enterprises (Payne & Webber, 2006; Brown & Lam, 2008). According to Oladipo and Abdalkader (2011), the labor force of an enterprise is essential to its achievement, and employee performance (PE) is reliant mainly on the suitable systems of human resource management (HRM). To achieve the goals, enterprises have to face vicious competitive business environments. Consequently, enterprises are supposed to concentrate on the capability of its HRM to augment the performance of its employees. Enterprises should focus more on human resource (HR), because the adoption of HRM systems can help stimulate employees' engagement in work (Alzyoud, 2018; Oluwatayo & Adetoro, 2020) and maximize their competency within the enterprise (Saleem and Khurshid, 2014).

HR in enterprises is viewed as ones of the most important strategic assets (Pfeffer, 1994). As a result, these enterprises that have long-term goals generally try to re-examine how to control HR, which is known as human resource management (HRM), indicating how such enterprises pay attention to the role of running HR. According to Khatri (1999), HR of an enterprise is the resource relating to competitive advantage due to its ability to swap other sources into production. HR is one of the most crucial elements providing enterprises with flexibility and adaptability. In addition, Rundle (1997) emphasizes a need that directors, not the enterprise, are the instrument of adaptivity to determine the way the enterprise could react to changing business environments. The rivals could replicate other inputs like raw material or technology but cannot duplicate HR. Those elements made them an exclusive resource and call for the efficient supervision. In addition, Rubel (2018) emphasized a higher commitment of HRM has a close relationship with employee behaviour, and sound HRM practices likely enable employee job satisfaction, which leads to PE (Bastida et al., 2018).

The systems of HRM could generate enterprises, which are distinguished by aptitude, flexibility and proficiency over the competitors. These enterprises employ procedures of recruiting, selecting, training and developing workers. The workers can in turn orient the hardest work on collaboration in the resources of the enterprise (Nancy, 2013). The influence of HRM on PE has been broadly examined. Numerous researchers have asserted that running workers is harder than controlling material and equipment (Lado & Wilson, 1994; Barney, 1991). Nonetheless, the enterprises, which have studied the way to control HR well, could enjoy more competitive advantage than their competitors as they acquire and deploy HR efficiently (Wright et al., 2003). Furthermore, the development, staying power and competitive ability of the enterprises are tied to the commitment of their employees. For the employees to be loyal to the enterprise they are content with the work, employees' contentment is considered as a critical requirement for the loyalty to the enterprise.

Based on Bishop et al. (2000), several scholars claimed that workers perceiving HRM in business as good possibly do better than the workers who do not. Hence, individual workers that regard HRM in business as helpful and concerned for the well-being could be more pleased with the work, which then can augment PE (Mathies & Ngo, 2014). Moreover, PE has been confirmed as one of the imperative determinants of organizational success; but the number of research projects exploring the causal link from HRM to PE is still humble (Quresh et al., 2010). Surrounded by the emergence of HRM, many academics have paid a good deal of attention to the field in developed nations. The influences of systems of HRM on employees' satisfaction are a research area of interest particularly in the circumstance of developed economies. Nevertheless, little is paid attention to the effect of HRM in the circumstance of emerging economies (Ray & Ray, 2011). HRM has been widely recognized as one of the significant factors in augmenting PE, but many enterprises in emerging economies pay little attention to HRM (Tabouli et al., 2016). This leads to the necessity in conducting more research on HRM in emerging economies.

Furthermore, previous research projects have examined the causal link from HRM systems to PE, employing the Generalized Linear Model. This approach only investigates the impacts of influential factors on the conditional mean of PE. Exploring how 'on average' the systems of HRM influence PE generates straightforward elucidation; but this typical method may possibly take no notice of various influences of HRM systems at different points of the conditional distribution of PE. Consequently, there is a need to scrutinize the influences of HRM systems on PE by using the quantile regression that is aimed to assess various influences of HRM systems at different points of the conditional distribution of PE. The current research attempts to assess the linkage from HRM systems to PE in Vietnam as a developing nation. The most relevant systems of HRM have been chosen for analysis such as recruitment and selection – SR, compensation and reward – RC, training and development – DT, and performance appraisal – AP. The analyses for the causal influences are undertaken applying the quantile regression for more comprehensive analyses.

## 2. Theoretical Framework

The notion of HRM has been broadly accepted as novel management systems, but it has remained undefined due to different usages (Tabouli et al., 2016). There have been three key ways to consider HRM (Guest, 1987). First of all, it refers to an innovative concept for people management, stating that enterprises had better change the name of the personnel unit but need not make any changes to the procedures. Second, it is referred to as an identification of personnel roles and clarification of the personnel unit work. Third, it is viewed as a completely novel procedure to control enterprises in a distinguishing approach and integrate HR into strategic management, emphasizing the significance of entirely employing full HR. Generally, HRM is considered as a set of procedures that are developed to maximize firm incorporation, employee loyalty, suppleness and quality. HRM is obtaining large contribution on firm performance in the global business environment (Rehman, 2012). Additionally, Akinbode (2011) affirmed that HRM has become very important for enterprise to formulate practicable mechanisms and improve PE (Hee & Jing, 2018; Cooper et al., 2019), which can lead the enterprise to maintain and develop in dynamic business environments; while Zia-ur-Rehman et al. (2015) noted that if enterprises have poor HRM, it is difficult for them to augment PE and improve business effectiveness. PE has been accepted as one of the most important concerns for enterprises as well as scholars, who have been finding out different approaches to improving PE. Consequently, PE is regarded as behaviors and attitudes of workers forward to organizational objectives (McCloy et al., 1994). Furthermore, Ahmad and Shahzad (2011) referred to PE as the behaviors of employees that could be measured and implemented in business and subject to the results of the employee work. The dependence of PE on HRM has been discussed and investigated by previous studies (Khan et al., 2019). Numerous scholars have referred to HRM as SR, DT, RC and AP (Sattar et al., 2015; Nadarajah et al., 2012). Numerous enterprises have underlined the roles of SR, DT, and AP, while others highlighted RC for PE. All of them are targeted in maximizing PE and finally increasing organizational performance.

### 2.1 The Effect of SR on PE

Recruitment refers to a practice that enterprises employ to draw and put persons into vacant positions at the workplace (Khan et al., 2019). It is also defined as appeal of prospective workers to the enterprise. Additionally, selection is a procedure that helps to decide on appropriate workers from the group of potential candidates (Khan et al., 2019). To choose proper employees, it is necessary to rely on the related and clear conditions. An unsuitable selection can enable the enterprise to suffer failure to achieve its objectives, which included large turnover, small efficiency and employee discontent (Storey, 2007). According to Kosiorok & Szczepańska (2016), there are various approaches to supervise employees expressed in the circumstance of HRM. Similarly, HRM embraces an entire host of employee behaviors relating to the goals of enterprises and pleasing work necessities. The role of SR is to decide on suitable employees for their positions and is one of the best systems of HRM, which assists management to draw potential workers whose performance, in turn, results in firm performance. A number of researchers advocated the standpoint that the efficient practice of SR could create competitive advantage as well as PE, and affirmed a positive relationship between the good process of SR and high PE (Amin et al., 2014). Anchored in the aforementioned arguments, it could come to the following hypothesis that, PE can be positively determined by SR (H1).

### 2.2 The Effect of DT on PE

Barau (2008) referred to training as a planned procedure to smooth the progress of learning among employees, which help them to be more efficient in performing their job; while to development as programs to develop technical as well as human relationships and theoretical proficiency of directors. In addition, Adeniji et al. (2013) asserted that the process of DT in business are enterprises' efforts to activate education of related proficiency and knowledge for their employees, which is imperative to organizational success as well as PE. As declared by Ahmed and Yohanna (2014), the practice of DT is one of the HRM systems, which equip workers with the needed competence and skills to their work. The competence and skills could help to change employees' behaviors so that they have been able to carry out their jobs professionally. The trained and developed knowledge is an important element that helps employees to do a good job and then enhance their job performance at individual as well as enterprises levels (Okechukwu, 2017). The expansion of employees' competencies is achieved due to the programs of DT in business. This is because the process of DT among employees could change not only proficiency as well as behaviors of workers, but it also enables them to adjust to innovation, which likely improves the effectiveness of employees as well as enterprises (Khan et al., 2016). A positive causal linkage from the programs of DT to PE has been discovered in previous studies (Afsana et al., 2016; Singh, 2016). Overall, it can posit that, PE can be positively determined by DT (H2)

### 2.3 The Effect of RC on PE

RC is very vital for employees as well as enterprises, because salaries and other bonuses to employees are ones of the major expenses incurred by enterprises (Guzak et al., 2017). RC is the payment offered by enterprise to their workers due to their willingness to carry out good jobs for the enterprise (Rana & Malik, 2017). Payment is likely financial and non-financial incentives (Sardar et al., 2011). Financial incentives consist of pay, bonuses; whereas non-financial ones include additional holiday and other leisure programs. Enterprises should engage their workers in suitable payment packages if they follow to obtain superior PE for business. Fair payments verify high self-esteem leading to subsequently high PE and are the amount considered as a vigorous contributor on PE. Furthermore, Ahmad and Shahzad (2011) asserted that, PE depends closely on financial rewards; likewise, Tessema and Soeters (2006) ascertained a positive connection from the practice of RC to PE. Whereas, Islam and Siengthai (2010) examined and found out the effect of RC on firm performance, Shezad et al. (2008) undertook a research project on the effect of HRM systems on PE recommended that, the practice of RC is positively connected to PE. Grounded on the above mentioned literature; it can assume that, PE can be positively determined by RC (H3).

### 2.4 The Effect of AP on PE

AP is one of the HRM systems, which represents a formal procedure used to monitor employees and is a managerial means intended to increase PE and efficiency (Brown & Heywood, 2005). Based on Amin et al. (2014), AP is to identify and enhance PE as well as to align PE with the targets of enterprise. The function of AP is to appraise PE and help employees to augment their efficiency as well as individual and firm performance (Dar et al., 2014). A fair system of AP could enhance PE, so will impose a positive effect on firm performance. As Brown and Benson (2003) affirmed, employee loyalty and performance could be enhanced through the practice of AP. Suitable justification and management of PE will result in higher employee satisfaction and specialized loyalty among employees. The main purpose of AP is to augment individual effectiveness with the prearranged criteria. Whereas Abutayeh and Al-Qataweh (2012) noticed a positive association from the practice of AP to PE, Amin et al. (2014) argued that an ineffective system of AP likely dissatisfies workers and puts a negative effect on PE. In addition, the complementary

systems of HRM like AP could result in larger effect on employee efficiency and there is a positive link between PE and the practice of AP (Brown & Heywood 2005). The above-mentioned literature leads to the following hypothesis that, PE can be positively determined by AP (H4).

More importantly, prior research work has analyzed and evaluated the effects of HRM systems on PE; however, the work has only explored these effects by applying the generalized linear model, which examined the relationships reliant on the conditional mean of PE. Conversely, this research work tries to employ the technique of quantile regression to investigate the influences HRM systems on PE at various influences with different points of the conditional distribution of PE.

Table 1. Reliability analyses

Dimension	Dimension-total correlation	Cronbach $\alpha$ if dimension removed	Cronbach $\alpha$
SR1	.724	.808	.854
SR2	.671	.823	
SR3	.649	.832	
SR4	.659	.827	
SR5	.650	.829	
DT1	.808	.916	.930
DT2	.861	.906	
DT3	.764	.924	
DT4	.767	.924	
DT5	.891	.901	
RC1	.678	.835	.862
RC2	.654	.841	
RC3	.664	.838	
RC4	.740	.818	
RC5	.676	.836	
AP1	.748	.869	.894
AP2	.800	.859	
AP3	.721	.875	
AP4	.714	.876	
AP5	.729	.874	
PE1	.797	.913	.927
PE2	.848	.904	
PE3	.813	.910	
PE4	.836	.905	
PE5	.765	.919	

### 3. Methodology

Vietnam is a fast growing nation in Asia. Consequently, enterprises there should adopt as many suitable management systems as possible in order to fight directly against their rivals in developed economies. Nonetheless, only few studies on such management systems like the systems of HRM have been explored in developing countries (Yesil & Kaya, 2013). Therefore, there is a big need to carry out more research on this field in developing countries, such as Vietnam. For that reason, this research selected Vietnam as a case study for analyses. The research population was composed of firms publicly listed on the three largest Stock Exchanges in Vietnam. They are Unlisted Public Company Market, Hanoi Stock Exchange, and Ho Chi Minh Stock Exchange. The approach of random simple

sampling was performed to choose 500 out of the population. The premature solicitations were undertaken to obtain responses from chief informants at the managerial levels of the firms. Each manager for every selected firm was approached to complete the research questionnaire. The 500 questionnaires were delivered out, but only 314 constructive answers with reasonable information, meeting the threshold of the sample size as suggested by Hair et al. (2011).

This research based the measures of SR, DT, RC, AP and PE on the studies of Shezad et al. (2008) and Khan et al. (2019). SR comprised five dimensions that are SR1, SR2, SR3, SR4 and SR5. DT consisted of five dimensions that are DT1, DT2, DT3, DT4 and TD5. RC was composed of five dimensions that are RC1, RC2, RC3, RC4 and RC5. AP included five dimensions that are AP1, AP2, AP3, AP4 and AP5. PE was made of five dimensions that are PE1, PE2, PE3, PE4 and PE5. A five-point Likert scale was applied to compute these dimensions for SR, DT, RC, AP and PE, which ranged from “strongly disagree – 1”, “disagree – 2”, “neutral – 3”, “agree – 4” to “strongly agree – 5”. The elucidation of calculating the research dimensions was above presented. Now the techniques utilized for analyzing the research data are subsequently described. After gathering the the research data based on the aforementioned scales, reliability analyses were undertaken to verify the reliability of the measurements. Afterward, the exploratory factor analysis was performed to check for the validity of the scale. To test the research hypotheses, the quantile regression analysis was employed.

#### 4. Empirical Findings

Table 2. Exploratory factor analysis

Factor	Dimension	Loading	Communality	KMO	Sig.
SR	SR1	.794	.700	.923	.000
	SR2	.756	.657		
	SR3	.771	.630		
	SR4	.774	.645		
	SR5	.770	.635		
TD	DT1	.822	.781		
	DT2	.837	.850		
	DT3	.738	.705		
	DT4	.750	.709		
	DT5	.882	.891		
RC	RC1	.698	.632		
	RC2	.681	.605		
	RC3	.778	.654		
	RC4	.800	.729		
	RC5	.766	.653		
AP	AP1	.734	.713		
	AP2	.762	.777		
	AP3	.782	.709		
	AP4	.716	.670		
	AP5	.765	.698		
PE	PE1	.775	.760		
	PE2	.804	.827		
	PE3	.792	.793		
	PE4	.806	.814		
	PE5	.710	.699		

The reliability analyses produced the outcomes in Table 1. As Table 1 shows, all of the 25 dimension-total correlations receive the numbers of more than 0.5 and the levels of Cronbach  $\alpha$  are all greater than the 0.7 threshold. In addition, the values of Cronbach  $\alpha$ , if dimension removed, are all smaller than their own current Cronbach  $\alpha$ s. These figures point out that all of the scales have adequate inside reliability (Hair et al. 2011). Thus, they should be kept for later analyses.

Furthermore, in order for the scale validity to be checked, an exploratory factor analysis was performed. The outcomes are illustrated in Table 2, with the factor-loadings whose values of smaller than 0.35 were suppressed. The scale validity was evaluated based on the discriminant validity and the convergent validity. According to Table 2, the communalities of the 25 dimensions all exceed the 0.5 smallest threshold. All of the factor loadings surpass the 0.5 limit. The communalities and the factor loadings indicate the convergent validity of measurements. The cross-loadings are all greater than the 0.3 value, demonstrating the discriminant validity of measurements. Moreover, KMO gets the value of over 0.7 at the 1% significance level. Overall, the findings support the scale validity (Hair et al. 2011). Accordingly, they are suitable to be retained for other analyses.

Before testing the research hypotheses, the composite factors were calculated by averaging their own dimensions. Earlier researchers have studied the causal connections from HRM to PE, generally based on the generalized linear model. That technique possibly pays no attention to diverse affecting levels at different points of the conditional distribution of PE. This research explores the effects by utilizing the quantile regression as well as the generalized linear model with OLS. The findings are displayed in Table 3.

Table 3. OLS & quantile regressions (explained variable: PE)

Explanatory variable	OLS	Quantiles						
		5%	10%	25%	50%	75%	90%	95%
SR	.091**	.257	.061	.052	.083**	.064**	.032**	.023**
TD	.528***	.529	.697***	.593***	.502**	.488***	.205***	.184***
RC	.099**	.053	.212**	.138***	.113**	.059**	.031**	.023*
AP	.146***	.232	.182*	.148***	.123***	.078***	.047***	.041***
C	1.054***	-.609	-.685*	-.496**	1.099***	2.109***	3.699***	3.889***
(Pseudo) R <sup>2</sup>	.503	.275	.347	.353	.367	.119	.024	.008

\*\*\* \*\* \*: Significance levels of 1%, 5% & 10%

As exhibited in Table 3, as regards the OLS regression, all of the explanatory variables (SR, TD, RC and AP) have significantly positive influences on the explained variable of PE. The effects of SR and RC are statistically significant at the 5% level with the estimates of 0.091 and 0.099 respectively; while the influences of TD and AP are statistically significant at the 1% level with the estimates of 0.528 and 0.146 respectively. These findings are parallel to the results from the regression of the 50% quantile, where the impacts of SR and RC are statistically significant at the 5% level with the estimates of 0.083 and 0.113 respectively; whereas the effects of TD and AP are statistically significant at the 1% level with the estimates of 0.502 and 0.123 respectively. The abovementioned results are in support for the research hypotheses from H1 to H4. The HRM practices of SR, DT, RC and AP have statistically significant impacts on PE. TD is the strongest determinant of PE. Conversely, SR is the weakest determinant of PE. The findings are in agreement with previous results. Nonetheless, in order to investigate the effects more thoroughly, this research applied the regression of quantile. As the figures in Table 3 illustrate, at the lower part of the conditional distribution of PE (at the 5% quantile), all of the HRM systems of SR, DT, RC and AP have no influence on PE. On the contrary, at the higher levels of the conditional distribution of PE (at the 50% and more quantiles) all of the HRM systems of SR, DT, RC and AP have statistical impacts on PE. At the 25% and less quantiles, SR does not affect PE. The results derived from the regression of quantile present a more apparent and comprehensive picture on the effects of HRM practice on PE, whereas those derived from the regression of OLS are simpler just taking the picture at the conditional mean of PE.

**5. Discussions and Conclusions**

The influences of HRM practices of SR, DT, RC and AP on PE have been previously investigated (Hee & Jing, 2018;

Cooper et al., 2019; Khan et al., 2019). Nevertheless, they are examined mostly based on the generalized linear model that explores the impacts of SR, DT, RC and AP on the conditional mean of PE. The current study has attempted to examine the causal links from the HRM practices of SR, DT, RC and AP to PE using the regression of quantile that evaluate various influential extents at different levels of the conditional distribution of PE. The empirical results disclose that, on the conditional mean of PE with the OLS or quantile regressions, suitable HRM practices likely augment employee performance at the workplace.

The practice of recruitment and selection is the weakest factor in augmenting employee performance; but the practice of training and development is the strongest factors in determining employee performance. The practice of performance appraisal is the second most imperative factors in enhancing employee performance, while the practice of compensation and reward takes the third importance. The practice of recruitment and selection only influences employee performance at the 50% or more quantiles. At the lower quantiles such as the 5% level, none of the HRM practices improves employee performance. In contrast, at the 50% or more quantiles, all of the HRM practices are statistically confirmed to enhance employee performance. Overall, the stability of effects of HRM practices on employee performance at the higher quantiles of employee performance is better than those at the lower quantiles. These findings provide a more comprehensive and clearer picture on the effects of HRM practices on employee performance, where the links between HRM practices and employee performance are different and dependent on the quantiles of employee performance.

The current study offers some contributions. It is one of the first studies employing the regression of quantile to examine the causal linkages from HRM practices to employee performance in Vietnam as an emerging country. The empirical findings provide researchers as well as business managers with a better knowledge of the multifaceted effects of HRM practices on employee performance. Consequently, the enterprises in dynamic business environments including Vietnam are able to deliver right decisions on the acceptance of suitable HRM practices in business, which can in turn increase employee performance and finally boost organizational performance.

## 6. Limitations

It is acknowledged that, this research suffers several limitations. Firstly, the research data was based on single respondents from firms; and consequently bias problem is likely to exist. Upcoming research could employ a multi-informant research design to escape from this possible bias. Secondly, this research is implemented in Vietnam as an emerging nation and the research findings are expected to apply in other emerging nations. Nevertheless, business environments among economies could be dissimilar; and therefore it should be careful to generalize the findings of this research.

## References

- Abutayeh, B., & Al-Qatawneh, M. (2012). The effect of human resource management practices on job involvement in selected private companies in Jordan. *Canadian Social Science*, 8(2), 50-57.
- Adeniji, A. A., Osibanjo, A. O., & Abiodun, A. J. (2013). Organizational change and human resource management interventions: An investigation of the Nigerian Banking Industry. *Serbian Journal of Management*, 8(2), 139-154. <https://doi.org/10.5937/sjm8-3712>
- Afsana, J., Afrin, F., & Tarannum, T. (2016). Effect of training on employee performance: An empirical study on telecommunication industry in Bangladesh. *Journal of Business and Technology (Dhaka)*, 10(2), 67-80. <https://doi.org/10.3329/jbt.v10i2.29468>
- Ahmad, S., & Shahzad, K. (2011). HRM and employee performance: A case of university teachers of Azad Jammu and Kashmir (AJK) in Pakistan. *African Journal of Business Management*, 5(13), 5249-5253.
- Ahmed, I., & Yohanna, Y. (2014). Training and development as a tool for enhancing employee's productivity: A case study of Ashaka cement company, Nigeria Plc. *IOSR Journal of Business and Management*, 16(5), 17-26. <https://doi.org/10.9790/487X-16531726>
- Akinbode, G. A. (2011). Demographic and dispositional characteristics as predictors of organizational citizenship behaviour. *IFE Psychologia: An International Journal*, 19(1), 375-404. <https://doi.org/10.4314/ifep.v19i1.64609>
- Alzyoud, A. A. Y. (2018). The influence of human resource management practices on employee work engagement. *Foundations of Management*, 10(1), 251-256. <https://doi.org/10.2478/fman-2018-0019>
- Amin, M., Ismail, W. K. W., Rasid, S. Z. A., & Selemani, R. D. A. (2014). The impact of human resource management practices on performance: Evidence from a Public University. *The TQM Journal*, 26(2), 125-142.

<https://doi.org/10.1108/TQM-10-2011-0062>

- Barau, S. H. (2008). *Management: A simple practical Approach*. Odenic Press: Jos, Nigeria.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120. <https://doi.org/10.1177/014920639101700108>
- Bastida, R., Marimon, F., & Carreras, L. (2018). Human resource management practices and employee job satisfaction in nonprofit organizations. *Annals of Public and Cooperative Economics*, 89(2), 323-338. <https://doi.org/10.1111/apce.12181>
- Bishop, J. W., Scott, K. D., & Burroughs, S. M. (2000). Support, commitment, and employee outcomes in a team environment. *Journal of Management*, 26(6), 1113-1132. <https://doi.org/10.1177/014920630002600603>
- Brown, M., & Benson, J. (2003). Rated to exhaustion? Reaction to performance appraisal processes. *Industrial Relations Journal*, 34(1), 67-81. <https://doi.org/10.1111/1468-2338.00259>
- Brown, M., & Heywood, J. S. (2005). Performance appraisal systems: determinants and change. *British Journal of Industrial Relations*, 43(4), 659-679. <https://doi.org/10.1111/j.1467-8543.2005.00478.x>
- Brown, S. P., & Lam, S. K. (2008). A meta-analysis of relationships linking employee satisfaction to customer responses. *Journal of Retailing*, 84(3), 243-255. <https://doi.org/10.1016/j.jretai.2008.06.001>
- Cherif, F. (2020). The role of human resource management practices and employee job satisfaction in predicting organizational commitment in Saudi Arabian banking sector. *International Journal of Sociology and Social Policy*, 40(7/8), 529-541. <https://doi.org/10.1108/IJSSP-10-2019-0216>
- Cooper, B., Wang, J., Bartram, T., & Cooke, F. L. (2019). Well-being oriented human resource management practices and employee performance in the Chinese banking sector: The role of social climate and resilience. *Human Resource Management*, 58(1), 85-97. <https://doi.org/10.1002/hrm.21934>
- Dar, A. T., Bashir, M., Ghazanfar, F., & Abrar, M. (2014). Mediating role of employee motivation in relationship to postselection HRM practices and organizational performance. *International Review of Management and Marketing*, 4(3), 224-238.
- Guest, D. (1987). Human resource management and industrial relations. *The Journal of Management Studies*, 24(5), 503-521. <https://doi.org/10.1111/j.1467-6486.1987.tb00460.x>
- Guzak, J. R., Crandall, B., & Alavinejad, H. (2017). Compensation and culture: A configurational fit between pay system and culture types. *Journal of Organizational Psychology*, 17(5), 109-117.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2011). *Multivariate data analysis*. New Jersey: Prentice Hall, USA.
- Hee, O. C., & Jing, K. R. (2018). The Influence of human resource management practices on employee performance in the manufacturing sector in Malaysia. *International Journal of Human Resource Studies*, 8(2), 129-147. <https://doi.org/10.5296/ijhrs.v8i2.12826>
- Islam, M. Z., & Siengthai, S. (2010). Human resource management practices and firm performance improvement in Dhaka Export Processing Zone (DEPZ). *Research and Practice in Human Resource Management*, 18(1), 60-77.
- Kerdpitak, C., & Jermsittiparsert, K. (2020). The Impact of Human Resource Management Practices on Competitive Advantage: Mediating Role of Employee Engagement in Thailand. *Systematic Reviews in Pharmacy*, 11(1), 443-452.
- Khan, A. A., Abbasi, S. O. B. H., Waseem, R. M., Ayaz, M., & Ijaz, M. (2016). Impact of training and development of employees on employee performance through job satisfaction: A study of telecom sector of Pakistan. *Business Management and Strategy*, 7(1), 29-46. <https://doi.org/10.5296/bms.v7i1.9024>
- Khan, M. A., Md Yusoff, R., Hussain, A., & Binti Ismail, F. (2019). The mediating effect of job satisfaction on the relationship of HR practices and employee job performance: Empirical evidence from higher education sector. *International Journal of Organizational Leadership*, 8(1), 78-94. <https://doi.org/10.33844/ijol.2019.60392>
- Khatri, N. (1999). Emerging issues in Strategic HRM in Singapore. *International Journal of Manpower*, 20(8), 516-529. <https://doi.org/10.1108/01437729910302714>
- Kosiorek, D., & Szczepańska, K. (2016). Relationships between organisational culture and human resources management. *Jagiellonian Journal of Management*, 2(3), 205-215.



- Lado, A. A., & Wilson, M. C. (1994). Human resource systems and sustained competitive advantage: A competency-based perspective. *Academy of Management Review*, 19(4), 699-727. <https://doi.org/10.5465/amr.1994.9412190216>
- Mathies, C., & Ngo, L. V. (2014). New insights into the climate–attitudes–outcome framework: Empirical evidence from the Australian service sector. *Australian Journal of Management*, 39(3), 473-491. <https://doi.org/10.1177/0312896213495054>
- McCloy, R. A., Campbell, J. P., & Cudeck, R. (1994). A confirmatory test of a model of performance determinants. *Journal of Applied Psychology*, 79(4), 493-505. <https://doi.org/10.1037/0021-9010.79.4.493>
- Nadarajah, S., Kadiresan, V., Kumar, R., Kamil, N. N. A., & Yusoff, Y. M. (2012). The relationship of HR practices and job performance of academicians towards career development in Malaysian Private Higher Institutions. *Procedia-Social and Behavioral Sciences*, 57(1), 102-118. <https://doi.org/10.1016/j.sbspro.2012.09.1163>
- Nancy, Q. (2013). *The impact of hrm practices on organizational performance: the case study of some selected rural banks*. A thesis submitted to the Department of Managerial Science, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.
- Okechukwu, W. (2017). Influence of training and development, employee performance on job satisfaction among the staff. *Journal of Technology Management and Business*, 4(1), 1-16.
- Oladipo, J. A., & Abdalkader, D. S. (2011). Strategic Human Resource Management and Organizational organizational commitment. *Human Relations*, 40(7), 445-70.
- Oluwatayo, A. A., & Adetoro, O. (2020). Influence of employee attributes, work context and human resource management practices on employee job engagement. *Global Journal of Flexible Systems Management*, 1-14. <https://doi.org/10.1007/s40171-020-00249-3>
- Payne, S. C., & Webber, S. S. (2006). Effects of service provider attitudes and employment status on citizenship behaviors and customers' attitudes and loyalty behavior. *Journal of Applied Psychology*, 91(1), 365-378. <https://doi.org/10.1037/0021-9010.91.2.365>
- Pfeffer, J. (1994). *Competitive advantage through people*. Harvard Business School Press, Boston, USA. <https://doi.org/10.2307/41165742>
- Quresh, T. M., Akbar, A., Khan, M. A., Sheikh, R. A., & Hijazi, S. T. (2010). Do human resource management practices have an impact on financial performance of banks?. *African Journal of Business Management*, 4(7), 1281-1288.
- Rana, M. H., & Malik, M. S. (2017). Impact of human resource (HR) practices on organizational performance: Moderating role of Islamic principles. *International Journal of Islamic and Middle Eastern Finance and Management*, 10(2), 186-207. <https://doi.org/10.1108/IMEFM-04-2016-0060>
- Ray, S., & Ray, I. A. (2011). Human resource management practices and its effect on employees' job satisfaction: a study on selected small and medium sized iron & steel firms in India. *Public Policy and Administration Research*, 1(1), 22-33.
- Rehman, S. (2012). A study of public sector organizations with respect to recruitment, job satisfaction and retention. *Global Business and Management Research*, 4(1), 76-88.
- Rubel, M. R. B., Rimi, N. N., Yusliza, M. Y., & Kee, D. M. H. (2018). High commitment human resource management practices and employee service behaviour: Trust in management as mediator. *IIMB Management Review*, 30(4), 316-329. <https://doi.org/10.1016/j.iimb.2018.05.006>
- Rundle, S. J. (1997). Flexibility, adaptiveness and responsiveness (FAR-ness) as the key success factors in market entry in the south east Asian growth wedge. *PhD thesis*, Department of Management, Monash University, Victoria, Australia.
- Saleem, I., & Khurshid, A. (2014). Do human resource practices affect employee performance?. *Pakistan Business Review*, 15(4), 669-688.
- Sardar, S., Rehman, A., Yousaf, U., & Aijaz, A. (2011). Impact of HR practices on employee engagement in banking sector of Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 2(9), 378-389.
- Sattar, T., Ahmad, K., & Hassan, S. M. (2015). Role of human resource practices in employee performance and job satisfaction with mediating effect of employee engagement. *Pakistan Economic and Social Review*, 53(1),

81-96.

- Shezad, K., Bashir, S., & Rammay, M. I. (2008). Impact of HR Practices on Perceived Performance of University Teachers in Pakistan. *International Review of Business Research Papers*, 4(2), 302-315.
- Singh, H. (2016). Impact of training on employee performance. *International Journal of Business Management and Scientific Research*, 18(1), 1-5. <https://doi.org/10.21904/weken/2016/v1/i1/93615>
- Storey, J. (2007). *Human resource management: A critical text*. Cengage Learning EMEA, USA.
- Tabouli, E. M., Habtoor, N. A., & Nashief, M. (2016). The impact of human resources management on employee performance: organizational commitment mediator variable. *Asian Social Science*, 12(9), 176-192. <https://doi.org/10.5539/ass.v12n9p176>
- Wright, P. M., Garden, T. M., & Moynihan, L. M. (2003). The impact of HRM practices on the performance of business units. *Human Resource Management Journal*, 13(3), 21-36. <https://doi.org/10.1111/j.1748-8583.2003.tb00096.x>
- Yesil, S., & Kaya, A. (2013). The effect of organizational culture on firm financial performance: Evidence from a developing country. *Procedia-Social and Behavioral Sciences*, 81(1), 428-437. <https://doi.org/10.1016/j.sbspro.2013.06.455>
- Zia-ur-Rehman, M., Faisal, H., & Khan, R. A. (2015). In public sector organizations, how the performance of employees is influenced by the HR practices-analyzing the perspective. *Journal of Managerial Sciences*, 9(1), 49-68.

### Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).