

ENHANCEMENT OF OPERATIONAL PERFORMANCE THROUGH STRATEGIC HRM PRACTICES: A CASE OF BANKING INDUSTRY

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Abstract

Based on the Guest 1997 organizational outcome model, this explanatory study examined the effects of five dimensions of practices of HR. i.e. performance evaluation, recruitment & selection, compensation & reward, career opportunities within organization and training and development on proximal business outcomes (Flexibility and Quality of Operations). The study validates components of GUEST model by integrating between HRM dimensions and banking operations, thus strengthens the existing theoretical model of GUEST by improving the comprehensiveness as it provides analytical framework for studying HR. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) was utilized in the current study, and tested the study hypotheses by SEM to analyze the proposed conceptual model. It was found that all five chosen HR practices had significant influence on the quality of operations however for flexibility of operations, performance appraisals and career within organization have shown significant role for banking industry of the country, Pakistan. The study contributed to the construction and validation of structural. path and measurement models(MM) of SHRM practices and two selected operational competitive outcomes based on theoretical and empirical foundations, which will help progress the human resource management future researches and important implications for HR managers, as very little work has been done on interdisciplinary framework of HR and OM specifically within context of South Asian banking Industry.

Keywords: Strategic Human Resource Management (SHRM); operational performance management; competitive priorities; banks; Pakistan

Introduction

Guest (1997) model illustrated that behaviors of workers are affected by HR practices in terms of increase in employee commitment, quality of work and flexibility of Operations. In modern organization Operations management (OM) is a key function, core study area in business schools, still operations managers are facing the challenge of working efficiently at low cost along with managing quality¹. This paper will conduct analysis to investigate the effects of HRM practices on the operations' quality and flexibility of banks, including objective as well as quantitative methodology with where previous

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¹ Piercy, N. (2012). Business history and operations management. *Business History*, 54(2), 154-178.

studies are synthesized on a relevant topic resulting into an overall specific finding^{2,3}. The study is carried out on banking employees as they can exercise considerable discretions in managing the operations of banks, also supported by Bartel⁴. As per the GUEST theory 1997 HR policies are the only way to get HR outcomes including adaptability, flexibility, employees' commitment and quality of operations.

The same theory of linkage between Human resource enhancement in an organization and operational performance of enterprises was also researched by Youndt⁵ and his coauthors. Internationally a mutual decision is agreed for localizing the HRM practices in the business world for supporting and augmenting the enterprise performances^{6,7}. In economies, financial institutions' strong development is essential for effective transition to a market based economy⁸, also viable banking system needs qualified, competent professionals to handle the daily operations in highly dynamic environment. There are 23 private sectors and three public sectors banks in Karachi (State Bank of Pakistan: 2017). Browning⁹ suggested meeting employees' needs through efficient HR practices leading to quality organizational operations, in turn influencing the employees' behavior which results in better business value, the concept in line with GUEST 1997¹⁰ model. Actually, the implicit and explicit motivational factors leads to positive employees' behavior ultimately producing affectively committed employees, low turnover and high quality performance^{11,12}.

As enterprises facing the challenges of globalization and free market economies, Sabeen¹³ concluded that at that time HRM practices were adopted in Pakistan in response to face these challenges, though still in developmental phase. Many authors and researchers have postulated through their empirical researches that human resources can be observed as a

² Deeks, J. J., Higgins, J., & Altman, D. G. (2008). Analysing data and undertaking meta-analyses. *Cochrane handbook for systematic reviews of interventions: Cochrane book series*, 243-296.

³ Shujahat, M., Akhtar, A., Nawaz, F., Wang, M., & Sumbal, M. S. (2020). Knowledge Risk Management in Two Tier HRM Structures. In *Knowledge Risk Management* (pp. 49-68). Springer, Cham.

⁴ Bartel, A. P. (2004). Human resource management and organizational performance: Evidence from retail banking. *Industrial & Labor Relations Review*, 57(2), 181-203.

⁵ Youndt, M. A., Snell, S. A., Dean, J. W., & Lepak, D. P. (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of management Journal*, 39(4), 836-866.

⁶ Yang, Y., & Lin, X. (2019). To integrate or not to integrate: HRM practice of Chinese banks in Canada. *The International Journal of Human Resource Management*, 30(14), 2186-2210.

⁷ Shujahat, Knowledge Risk, 2.

⁸ Sparrow, P., Brewster, C., & Chung, C. (2016). *Globalizing human resource management*. Routledge.

⁹ Browning, V. (2006). The relationship between HRM practices and service behaviour in South African service organizations. *The International Journal of Human Resource Management*, 17(7), 1321-1338.

¹⁰ Guest, D. E. (1997). HRM and performance: A review and agenda. *The International Journal of Human Resource Management*, 8(3), 263-276.

¹¹ Guerrero, S., & Barraud-Didier, V. (2004). High-involvement practices and performance of French firms. *The International Journal of Human Resource Management*, 15(8), 1408- 1423.

¹² Browning, Relationship HRM, 2.

¹³ Jamil, S. (2005). Human resource management - a fad in quandary. Dawn, 27 June, [http://archives.dawn.com/2005/06/27/ebr10 .htm](http://archives.dawn.com/2005/06/27/ebr10.htm), accessed 02 April 2011.

source of attaining persistent competitive advantage for enterprises^{14, 15, 16, 17}. It is also important to observe the definition of strategic human resource management (SHRM) along with different organizational strategies, “*Human Resource Management is the pattern of planned human resource deployments and activities intended to enable an organization to achieve its goals*” Wright¹⁸(p.298)

Lepak and Shaw¹⁹ literature review on SHRM is also built on this definition. While proceeding further another broader definition of SHRM is needed. Subsequently, for that purpose SHRM is defined as ‘an inter-reliant bundle of intended or promising human resource activities that are intended to achieve positive organizational outcomes’²⁰. Five selected intended HRM functions based on evidence from literature review i.e. performance evaluation., recruitment & selection, compensation & reward, career opportunities within organization and training & development were studied as independent variables to check their impact on flexibility and Quality of organizations’ operations performance, an HRM outcome, treated in this study as dependent variables. Thus the study authors tried to integrate HR functions with competitive priorities as a measure of organizational performance, the results will play a moderate role for Bank HR managers in strategic decision making. Assessing the different aspects of the business processes outcomes is defined as Operational performance²¹, which includes the reliability, flexibility, production cycle time, and quality of productions. Piercy²² in his very detailed analysis of the historical development of the subject ‘Operations management’ and its business history highlighted a continuous lack of consistency and accuracy in the subject, being portrayed and suggested business community shall work alongside operations colleagues and generate original or/and integrative approaches to operations management(OM) for the next generation. As researches has identified that better performance in operations in turn affects different performance indicators of business performance such as market share and customer satisfaction²³ and customer loyalty²⁴. Some of the challenges faced by today’s managers operations are to improve the quality as the same time reduces the cost while working efficiently and facing

¹⁴ Akhtar, S., Ding, D. Z., &Ge, G. L. (2008). Strategic human resource management practices and their impact on company performance in Chinese enterprises. *Human Resource Management*, 47(1), 15–32.

¹⁵ Marler, J. H., & Fisher, S. L. (2013). An evidence-based review of e-HRM and strategic human resource management. *Human Resource Management Review*, 23(1), 18-36.

¹⁶ Akdere, M. (2009). A multi-level examination of quality-focused human resource practices and firm performance: evidence from the US healthcare industry. *The International Journal of Human Resource Management*, 20(9), 1945-1964.

¹⁷ Saridakis, G. & Cooper, C. L. (2017). Exploring the relationship between HRM and firm performance: A meta-analysis of longitudinal studies. *Human Resource Management Review*, 27(1), 87-96.

¹⁸ Wright, P. M., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*, 18(2), 295–320.

¹⁹ Lepak, D. P., & Shaw, J. (2008). Strategic HRM in North America: Looking to the future. *The International Journal of Human Resource Management*, 19(8).

²⁰ Boon, C., Eckardt, R., Lepak, D. P., & Boselie, P. (2017). Integrating strategic human capital and strategic human resource management. *The International Journal of Human Resource Management*, 1-34.

²¹ Voss, C. A., Åhlström, P., & Blackmon, K. (1997). Benchmarking and operational performance: some empirical results. *International Journal of Operations & Production Management*, 17(10), 1046-1058.

²² Piercy, Business history and operations management, 2.

²³ Voss, Benchmarking & Operational Performance, 4.

²⁴ Kumar, V., Batista, L., & Maull, R. (2011). The impact of operations performance on customer loyalty. *Service Science*, 3(2), 158-171.

increased global competition, dominate²⁵. Sanchez²⁶ defined flexibility as "firm's abilities to respond to various demands from dynamic competitive environments" (pg. 138), an important performance dimension to achieve competitive priorities^{27,28,29,30}.

The present research is developed in four (4) sections, section 1 includes the introduction of the topic, Section 2 sheds light on review of literature involving the linkage between SHRM practices and its impact on operations performance mentioning theoretical background. Section 3 comprises of the empirical studies and discussion on hypothesis; section 4 presented analysis of data and results achieved through hypotheses testing and future implications of the present research.

Literature Review

One concern regarding HRM-performance linkage were the theoretical foundations of HRM, firstly examined by Ferris³¹; Wood³²; Guest³³, with a view to find out and reveal its underlying assumptions and to test new hypotheses debated by resource based view (RBV) theory^{34,35} as human resource being the unique resource, inimitable and therefore a firm can achieve superior performance on the basis of high performing HR practices. Another concern throughout the empirical researches in top international refereed journals was issues related to validity of research methodological design and the techniques used for the concept^{36,37}. Our research focus is to check certain assumptions on the above linkage between practices of SHRM with operational performances³⁸ as depicted in Figure 1 within the scope of banks, Karachi. Boselie³⁹ also did the Meta analysis including all the previous empirical studies till 2003 on the debate of HRM-performance linkage. The

²⁵ Piercy, Business history and operations management, 2.

²⁶ Sanchez, R, 1995, Strategic flexibility in product competition. *Strategic Management Journal*, 16: 135-159.

²⁷ Adil, M. S. (2015). Strategic Human Resource Management Practices and Competitive Priorities of the Manufacturing Performance in Karachi. *Global Journal of Flexible Systems Management*, 16(1), 37-61.

²⁸ Beltrán-Martín, I., & Roca-Puig, V. (2013). Promoting employee flexibility through HR practices. *Human Resource Management*, 52(5), 645–674.

²⁹ Boon, Integrating strategic human capital, 4.

³⁰ Shujahat, Knowledge Risk, 2.

³¹ Ferris, G.R., Hochwater, W.A., Buckley, M.R., Harrel-Cook, G. and Frink, D.D. (1999). 'Human Resources Management: some new directions'. *Journal of Management*, 25: 3, 385-414.

³² Wood, S. (1999). 'Human resource management and performance'. *International Journal of Management Reviews*, 1: 4, 367-413.

³³ Guest, HRM and performance, 3.

³⁴ Barney, J.B. (1991), 'Firm Resources and Sustained Competitive Advantage,' *Journal of Management*, 17, 99–120.

³⁵ Hitt, M. A., Carnes, C. M., & Xu, K. (2016). A current view of resource based theory in operations management: A response to Bromiley and Rau. *Journal of Operations Management*, 41(10), 7e109.

³⁶ Gerhart, B., Wright, P.M. and McMahan, G. (2000a). 'Measurement error in research on the human resource and firm performance relationship: further evidence and analysis'. *Personnel Psychology*, 53: 4, 855-872.

_____. (2000b). 'Measurement error in research on human resources and firm performance: how much error is there and how does it influence effect size estimates?'. *Personnel Psychology*, 53: 4, 803-834.

³⁷ Wright, P.M. and 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 and A. Howard (eds), *The New Workplace: a Guide to the Human Impact of Modern Working Practices*, London: John Wiley & Sons.

³⁸ Voss, Benchmarking & Operational Performance, 4.

³⁹ Boselie, P., Dietz, G., & Boon, C. (2005). Commonalities and contradictions in HRM and performance research. *Human Resource Management Journal*, 15(3), 67–94.

HRM-performance relationship model developed by Guest (1997) – depicted in Figure 1, serves as a useful pictorial representation of the constructs involved.

Human Resource Management (HRM) Practices and Operations Management Success

Pakistan with a population of approximately 180 million ranks sixth among the most populous countries in the world. Karachi being the hub of economic activities with lots of employment opportunities, the focus of study would be banks of Karachi. Scarcity and maladaptation of HRM practices have resulted in potentially reducing the performances of the organizations in Pakistan, with majority of SMEs enterprises merely concentrate on administration functions only with no separate dedicated HR departments. The diverse nature of the topic of Strategic human resource management (SHRM) has produced number of empirical researches that had studied the impact of HRM practices on performance of organizations^{40,41,42,43,44,45,46}. Still, the issue of impact of HRM practices on operations performance has received very little attention except few of the work by Youndt⁴⁷, Ahmad⁴⁸ and Birdi⁴⁹ to generalize the findings across different sectors. Bartel⁵⁰ has studied the impact of HRM with the view managers have considerable discretion in banking operations of Canada. The analysis of Walls and Woods⁵¹ based on twenty five previous studies focused on the impact of SHRM activities on operational practices performance. Similarly, Perez Lopez (2005) found a direct effect of human resource practices on the business performance with significant mediating effect of organizational learning between the relationships.

Wright⁵²; Yang⁵³ and Ahmad⁵⁴ also examined the extent to which HRM-Performance linkage has been addressed by literature, The impact of HRM practices on banks financial

⁴⁰ Boon, Integrating strategic human capital, 4.

⁴¹ Ahmad, S., & Schroeder, R. G. (2003). The impact of human resource management practices on operational performance: recognizing country and industry differences. *Journal of operations Management*, 21(1), 19-43.

⁴² Sun, L. Y., 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.

⁴³ Birdi, K., Clegg, C., Patterson, M., Robinson, A., Stride, C. B., Wall, T. D., & Wood, S. J. (2008). The impact of human resource and operational management practices on company productivity: A longitudinal study. *Personnel Psychology*, 61(3), 467-501.

⁴⁴ Hong, Y., Jiang, Y., Liao, H., & Sturman, M. C. (2017). High performance work systems for service quality: boundary conditions and influence processes. *Human Resource Management*, 56(5), 747-767.

⁴⁵ Yang, To integrate or not, 2.

⁴⁶ Taamneh, A., Alsaad, A. K., & Elrehail, H. (2018). HRM practices and the multifaceted nature of organization performance. *EuroMed Journal of Business*.

⁴⁷ Youndt, Human resource management, 2.

⁴⁸ Ahmad, The impact of HRM, 6.

⁴⁹ Birdi, The impact of human resource, 6.

⁵⁰ Bartel, Human resource management, 2.

⁵¹ Wall, T. D., & Wood, S. J. (2005). The romance of human resource management and business performance, and the case for big science. *Human relations*, 58(4), 429-462.

⁵² Wright, P. M., Gardner, T. M., Moynihan, L. M., & Allen, M. R. (2005). The relationship between HR practices and firm performance: Examining causal order. *Personnel Psychology*, 58(2), 409-446.

⁵³ Yang, To integrate or not, 2.

⁵⁴ Ahmad, The impact of HRM, 6.

performance was also validated by Quresh⁵⁵, Al-Zahrani⁵⁶ and Taamneh *et al.*⁵⁷, Patrick⁵⁸ in his study on finding the gap between OM and HRM concluded that improving the Human factors resulted in joint positive human and productivity effects. Boselie⁵⁹ (pg: 81) in the conclusion of his empirical research concluded that research on HRM has been found to positively impacting organizations' operational performance^{60,61}. De Menezes⁶² in the integrated model tested the impact of seven core practices of Operations Management and HRM related practices, a longitudinal study based in UK using 24 years of data.

Khan⁶³ and Adil⁶⁴ noticeably were perhaps the last relevant contributions on HRM–firm performance relationship in Pakistan however, the study was conducted in the oil & gas and manufacturing sector of the country. Due to lack of studies HRM-OM relationship on Banking context of Asian region and as Banks play an instrumental role in the economic development of a economy, with managers having considerable discretion in improving banking operations and thus superior performance. Therefore HR-OM relationship was important to be checked and validated within banking context, the present study aimed to fill this gap of empirical validation of the integration of HR functions with strategic competitive priorities and also strengthens the dimensions of GUEST theoretical model supported by RBV theory. Moreover, it will also will provide a more comprehensive view and outcomes that can be generalize to different environments for conceptual understanding and theory development.

Empirical Studies

The importance and linkage between SHRM and OM is an accepted way of achieving competitive advantage in businesses by enabling the enterprises to design a unique strategy that will lead to increase the firms' ultimate performances^{65,66,67}. In our study, these concepts are reviewed in the perspective of banking sector of Pakistan. Within

⁵⁵ 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.

⁵⁶ AL-Zahrani, A. A., & Almazari, A. A. (2014). The impact of affective human resources management practices on the financial performance of the Saudi banks. *Review of Integrative Business & Economics*, 3(1), 327–336.

⁵⁷ Taamneh, HRM practices, 6.

⁵⁸ Patrick Neumann, W., & Dul, J. (2010). Human factors: spanning the gap between OM and HRM. *International Journal of Operations & Production Management*, 30(9), 923-950.

⁵⁹ Boselie, Commonalities and contradictions, 6.

⁶⁰ *Ibid*

⁶¹ Guest, HRM and performance, 3

⁶² De Menezes, L. M., Wood, S., & Gelade, G. (2010). The integration of human resource and operation management practices and its link with performance: A longitudinal latent class study. *Journal of Operations Management*, 28(6), 455–471.

⁶³ Khan, M. A. (2010). Effects of human resource management practices on organizational performance—An empirical study of oil and gas industry in Pakistan. *European Journal of Economics, Finance and Administrative Sciences*, 24, 157–175.

⁶⁴ Adil, Strategic Human Resource Management, 4.

⁶⁵ Youndt, Human resource management, 2.

⁶⁶ Birdi, The impact of human resource, 6.

⁶⁷ Alzhrani, A. M. (2020). Outsourcing human resource functions and their impact on organizational performance. *Global Journal of Management And Business Research*.

strategic human resource management practices few approaches like training and development^{68,69,70,71,72}, selection processes^{73,74,75} and performance evaluation^{76,77} are considered as vital in achieving the sustainable competitive advantage, thus five HR practices were shortlisted based on significance evident from literature review, from the list of 26-HR practices provided by Guest⁷⁸, also adapted from Boselie⁷⁹. Instead of conventional financial measures, taken as a means of measuring organizational performance in previous studies^{80,81,82}, the author has taken two competitive dimensions Quality & Flexibility in Business operations as measure of Bank performances adapted from Jayaram, Droge and Vickery^{83,84}.

Karthi and Graf⁸⁵ in their research concluded effectiveness of training programs is vital for growth of the banks. In a comparative analysis of Greek banks in 2005 stressed upon focus on differentiation in terms of quality to achieve competitive advantage, increased emphasis on strategic T&D efforts, leads to increased employee's commitment, customer satisfaction and finally improvement in the Banks' operations quality⁸⁶. Besides the Gronroos⁸⁷ in his book of service marketing, asserted that training is a prerequisite for achieving and improving the operations quality in service oriented businesses.

⁶⁸ *Ibid.*

⁶⁹ Akhtar, Strategic human resource management, 3.

⁷⁰ Wall, The romance of human resource, 7.

⁷¹ Quresh, Do human resource management practices, 7.

⁷² Paul, A. K., & Anantharaman, R. N. (2003). Impact of people management practices on organizational performance: analysis of a causal model. *International Journal of Human Resource Management*, 14(7), 1246-1266.

⁷³ Wright, The relationship, 7.

⁷⁴ Chand, M., & Katou, A. A. (2007). The impact of HRM practices on organizational performance in the Indian hotel industry. *Employee Relations*, 29(6), 576-594.

⁷⁵ Perez Lopez, S., Montes Peon, J. M., & Vazquez Ordas, C. J. (2005). Human resource practices, organizational learning and business performance. *Human Resource Development International*, 8(2), 147-164.

⁷⁶ Akhtar, Strategic human resource management, 3.

⁷⁷ Shujahat, Knowledge Risk, 2.

⁷⁸ Guest, D. E. (2011). Human resource management and performance: still searching for some answers.

Human Resource Management Journal, 21(1), 3-13.

⁷⁹ Boselie, Commonalities and contradictions, 6.

⁸⁰ Wright, The relationship, 7.

⁸¹ Wright, P. M., Dunford, B. B., & Snell, S. A. (2001). Human resources and the resource based view of the firm. *Journal of Management*, 27, 701-721.

⁸² Akhtar, Strategic human resource management, 3.

⁸³ Masum, A. K. M., Azad, M. A. K., & Beh, L. S. (2015). The role of human resource management practices in bank performance. *Total Quality Management & Business Excellence*, (ahead-of-print), 1-16.

⁸⁴ Jayaram, J., Droge, C., & Vickery, S. K. (1999). The impact of human resource management practices on manufacturing performance. *Journal of operations Management*, 18(1), 1-20.

⁸⁵ Karthi, R., & Graf, S. (2010). Impact of Training in Indian Banking Sector-An Empirical Investigation. *International Journal of Business and Management*, 5(7), p77.

⁸⁶ Glaveli, N., & Kufidu, S. (2005). The old, the young and the restless: A comparative analysis of the impact of environmental change on training in four Greek banks. *European Business Review*, 17(5), 441-459.

⁸⁷ Grönroos, C. (2007). *Service management and marketing: customer management in service competition*.

John Wiley & Sons.

Hypothesis 1 a:***There is significant impact of Training on Flexibility of operations in banks.******Hypothesis 1 b:******There is significant impact of Training on Quality of operations in banks.***

Gerhart and Milkovich⁸⁸ defined a firm's Pay level is the average compensation relative to that of other, competing organizations in line with 'Efficiency wage theory' for organizations⁸⁹. Paul⁹⁰ concluded that HRM practices such impacts the operational⁹¹ and financial performance of the organization while having direct effect on the parameters, including employee retention, employee productivity, product quality, speed of delivery and operating cost. Many other researches have emphasized on one single HR practice i.e. compensation system and linked it with organizational performance^{92,93,94}. On the contrary, in an Indian study by Som, found out that innovative compensation practices cannot be directly aligned with a firm performance; in line with the study results by Adil⁹⁵.

Instead, various other studies^{96,97} have revealed the importance of compensation systems and its influence on the firm's financial and operational performance. After reviewing the above literature, the author suggested the following hypothesis to find out if any significant influence of Compensation and rewards systems on the Operational performance of the firms in terms of its quality and flexibility of operations.

Hypothesis 2 a:***There is significant impact of Compensation & Rewards on Flexibility of operations in banks.******Hypothesis 2 b:******There is significant impact of Compensation & Rewards on Quality of operations in banks.***

⁸⁸ Gerhart, B., & Milkovich, G. T. 1990. Organizational differences in managerial compensation and financial performance. *Academy of Management Journal*, 33: 663–691.

⁸⁹ Akerlof, G. A., & Yellen, J. L. (1986). *Efficiency wage models of the labor market*. Cambridge University Press.

⁹⁰ Paul, Impact of people, 8.

⁹¹ Ahmad, The impact of HRM, 6.

⁹² *Ibid.*

⁹³ Gerhart, Organizational differences, 9.

⁹⁴ Alzhrani, Outsourcing human resource functions, 8.

⁹⁵ Adil, Strategic Human Resource Management, 4.

⁹⁶ Ahmad, The impact of HRM, 6.

⁹⁷ Chebat, J., Babin, B. and Kollias, P. (2002) 'What Makes Contact Employees Perform? Reactions to Employee Perceptions of Managerial Practices', *International Journal of Bank Marketing*, 20(7): 325–32.

Chebat⁹⁸ in their study concluded that employee's perceptions about fairness at workplace, payment system, job supervision and recruitment and selection procedures were found as key predictors of employees' performances in service-oriented enterprises. Similarly, among the seven HRM practices studied by Browning⁹⁹, to find their impact on service-oriented organizations performance appraisal was found with the strongest association with service behavior of employees leading to increased productivity. In addition, Masum¹⁰⁰ and Qureshi¹⁰¹ concluded training and performance appraisal were found most significant predictors of the financial performance of banks. On the other hand, Collings¹⁰² concluded that, surprisingly performance appraisal based on competence was found having no significant relationship with organizations' financial performance outcomes.

Hypothesis 3 a:

There is significant impact of Performance appraisal/evaluation on Flexibility of operations in banks.

Hypothesis 3 b:

There is significant impact of Performance appraisal/evaluation on Quality of operations in banks.

While, recruiting HR practitioners shall focus on capabilities, values, character references and a cultural fit between employee and organization while recruitment and selection instead of looking for just skills required for the job¹⁰³. Moreover, Lopez¹⁰⁴ and Taamneh¹⁰⁵ revealed hiring practices among other HR activities was found with highest direct effect on business performance. Similarly, Quresh¹⁰⁶ explored in their research that those banks which are involved in high merit-based recruitment and selection practices had candidates with required attitudes, skills and knowledge which have positive relationship with performances of banks.

Hypothesis 4a:

There is significant impact of Recruitment & selection practices on the Flexibility of operations performed in banks.

⁹⁸ *Ibid.*

⁹⁹ Browning, Relationship HRM, 2.

¹⁰⁰ Masum, The role of human resource management, 9.

¹⁰¹ Quresh, Do human resource management practices, 7.

¹⁰² Collings, D. G., Demirbag, M., Mellahi, K., & Tatoglu, E. (2010). Strategic orientation, human resource management practices and organizational outcomes: Evidence from Turkey. *The International Journal of Human Resource Management*, 21(14), 2589–2613.

¹⁰³ Williams, A. P. O. (2001) A belief-focused process of organizational learning, *Journal of Management Studies*, 38(1), pp. 65 – 87.

¹⁰⁴ Lopez, Human resource practices, 8.

¹⁰⁵ Taamneh, HRM practices, 6.

¹⁰⁶ Quresh, Do human resource management practices, 7.

Hypothesis 4b:

There is significant impact of Recruitment & selection practices on the Quality of operations in banks

Researchers argued by developing employees through useful career opportunities a unique human resource base and competitive edge can be sustained¹⁰⁷, same results were concluded in a study on eighteen (18) Nigerian insurance companies¹⁰⁸. It is established that's it's the duty of management to provide career paths, perform career planning to all concerned employees within the organization, Authors^{109,110,111} in their researches emphasized the importance of Information (or knowledge) sharing having a strong relationship with strategic levels of HRM practices and suggested those employees having frequent access to the required timely information observes successful career path, vice versa usually are hunted by competitive firms with better career and employment opportunities, eventually enabling the competitive rival firms to attain a sustainable competitive edge¹¹². Yamamoto¹¹³ explained career strategy as an employee behavior as the attainment of a career goal first and the employee's individual goals, the author further discussed that on the job training (OJT) is essential for development of human resource, if workers intend to attain their career goals. Based on the above studies following propositions was developed to be tested to check the impact of career planning practices on organization's operational performance.

Hypothesis 5a:

There is significant impact of Career within organization practices on the Flexibility of operations performed in banks.

Hypothesis 5b:

There is significant impact of Career within organization practices on the Quality of operations in banks.

Patrick¹¹⁴ in his research on 45 empirical studies reported that when human factors are considered in designing the operational systems, the evidence and theory both suggested that, it resulted in joint positive human and quality effects, also confirming the results of

¹⁰⁷ Adil, Strategic Human Resource Management, 4.

¹⁰⁸ Sani, A. D. (2012). Strategic human resource management and organizational performance in the Nigerian insurance industry: The impact of organizational climate. *Business Intelligence Journal*, 5(1), 8–20.

¹⁰⁹ Nielsen, P., Rasmussen, P., Fong, C. Y., Ooi, K. B., Tan, B. I., Lee, V. H., & Chong, A. Y. L. (2011). HRM practices and knowledge sharing: an empirical study. *International Journal of Manpower*.

¹¹⁰ Shujahat, Knowledge Risk, 2.

¹¹¹ Alzhrani, Outsourcing human resource functions, 8.

¹¹² Lin, H.-F., & Lee, G.-G. (2005). Impact of organizational learning and knowledge management factors on e-business adoption. *Management Decision*, 43 (2), 171-188.

¹¹³ Yamamoto, H. (2006). The relationship between employees' inter-organizational career orientation and their career strategies. *Career Development International*, 11(3), 243-264.

¹¹⁴ Neumann, Human factors:, 7.

the study conducted by Paul¹¹⁵, also assured by the study of Wright¹¹⁶. Moreover, Ueno¹¹⁷ in his research has confirmed a strong association between improving service quality and HRM practices. Similarly, Chand¹¹⁸ studied 52 hotels of India, it was found that HRM practices are positively related to the improvement in the quality of services provided in those hotels. Thus, all the supporting evidences showed a strong relationship between HRM practices and quality of operations performance across different service sectors of country. Alzhrani¹¹⁹ identified the lack of proper designing and implementation of HR policies and/or procedures in corporate world due to lack of qualified professionals so stressed the role of outsourcing HR functions for achieving enhanced organizational performances. In spite of these challenges there is continuous effort for knowledge development and practices enhancement through HR related researches and by policy makers.

The author also investigated previous empirical studies for measuring effectiveness of HR in terms of ensuring HR outcomes in the form of employee's commitment, competence development and flexibility^{120, 121}. The Resource based view (RBV) theory had played its role in the development of HRM by shifting the focus in literature by emphasizing not on external variables but on internal variables i.e. firms' capabilities as a source of competitive advantage¹²². Further, Wright¹²³ and Jayaram¹²⁴ also analyzed and confirmed the relationship between HRM activities and firms' operational competitive priorities (i.e., product quality, delivery reliability, flexibility) within context of manufacturing-based firms. This assumption about the link between various HR initiatives and its effects are additive in nature, an implicit assumption by Barney; consistent with the emphasis on internal fit in the resource-based view of the firm¹²⁵, suggested the importance of individual policies or practices "have limited ability to generate competitive advantage in isolation," but "in combination ... they can enable a firm to realize its full competitive advantage"(p.6),

¹¹⁵ Paul, Impact of people, 8.

¹¹⁶ Wright, The relationship, 7.

¹¹⁷ Ueno, A. (2012). Which HRM practices contribute to service culture? *Total Quality Management & Business Excellence*, 23 (11-12), 1227-1239.

¹¹⁸ Chand, M. (2010). The impact of HRM practices on service quality, customer satisfaction and performance in the Indian hotel industry. *The International Journal of Human Resource Management*, 21(4), 551-566.

¹¹⁹ Alzhrani, Outsourcing human resource functions, 8.

¹²⁰ Marti'n, Promoting employee flexibility, 4.

¹²¹ Alzhrani, Outsourcing human resource functions, 8.

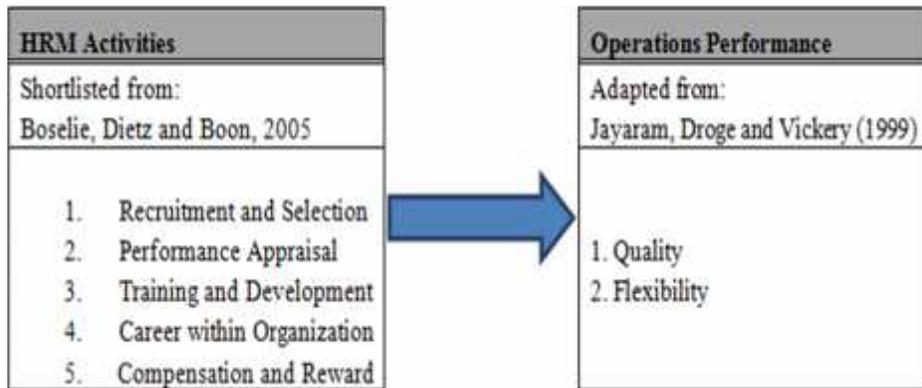
¹²² Barney, Firm Resources, 5.

¹²³ Wright, The relationship, 7.

¹²⁴ Jayaram, The impact of human resource management, 8.

¹²⁵ Barney, Firm Resources, 5.

Figure 1: Research Framework



Critical Analysis of the Literature Review

This study has at least provided a base contributing to the link between SHRM and operations management by integrating the theory and empirical studies and to investigate whether it leads to improved performance within banks context. Based on the conceptual theory and results of empirical studies, it is formulated that higher level management shall explicitly focus to invest in high performance SHRM practices to gain competitive edge by focusing on contextual variables and facilitate the human resource by keeping the information transparent so as to help take them right/rational. Decisions^{126,127,128,129}.

As witnessing the spawned interest, during the past 25 years related to the importance of strategic HRM in managing firms' competitive advantage, much more work is needed for the theoretical development in the field¹³⁰. On the other hand, Operations Management (OM) should also set in particular, whether certain strategic initiatives are linked to improved performance, and also research into the processes and the mechanisms which come into play^{131,132}.

Guest¹³³, Fombrun¹³⁴, Delaney¹³⁵, Boxall¹³⁶ are some of the few researchers who had reviewed the progress regarding the development of relevant theory about the relationship

¹²⁶ Ahmad, The impact of HRM, 6.

¹²⁷ Taamneh, HRM practices, 6.

¹²⁸ Yang, To integrate or not, 2.

¹²⁹ Birdi, The impact of human resource, 6.

¹³⁰ Wright, Theoretical perspectives for SHRM, 3.

¹³¹ Voss, Benchmarking & Operational Performance, 4.

¹³² Alzhrani, Outsourcing human resource functions, 8.

¹³³ Guest, HRM and performance, 3.

¹³⁴ Fombrun, C. J., Tichy, N. M., & Devanna, M. A. (1984). Strategic human resource management.

¹³⁵ 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.

¹³⁶ Boxall, P. (1998). Achieving competitive advantage through human resource strategy: Towards a theory of industry dynamics. *Human resource management review*, 8(3), 265-288.

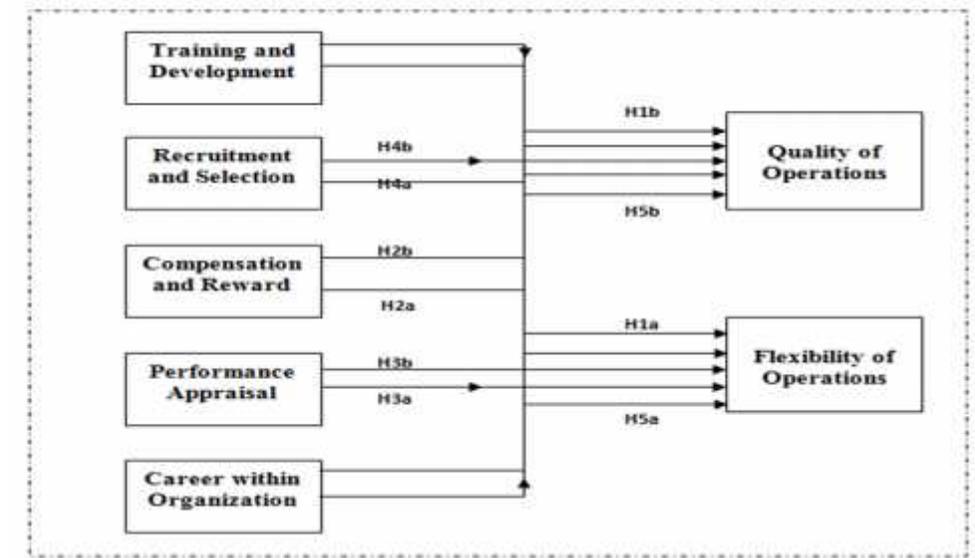
between human resource management and performance, in different phases. The first phase is associated with the establishment of theory related to the linkage between HRM and performance in 1980s. During 1990s statistical studies on HRM and performances began to appear. Immediately after second phase third phase emerged which demonstrated that the studies have used different dimensions of HR and measured performances in very different ways¹³⁷. In the fourth phase a growing sophistication for the refinement of models can be observed, Barney¹³⁸ presented the resource-based view of the firm. The main conclusion from the review is that still there are number of challenges for the future researchers regarding the aspects of its theory, management processes and methodology of the research.

The literature review sets out comprehensive investigation options for the researcher to contemplate. Two research questions have been derived for our analysis:

1. Is it a dominant theoretical framework model within the context of Banking sector, Karachi?
2. What are the conceptualization and outcomes of the 'HRM' intervention?

In order to find the answers of our research questions and after conducting the critical analysis of the existing literature, following is our proposed Research framework:

Figure 2: Hypothesized Model



¹³⁷ Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of management journal*, 39(4), 779-801.

¹³⁸ Barney, Firm Resources, 5.

Methodology

Sample, Data Collection and screening

The unit analysis for the current study was Banks' employee as all banks employees of Karachi remained the targeted population. Pakistan. A sample of 368 responses was collected from bank employees, in order to attain the study objectives using a self-administered structured questionnaire written in English. As per Chanda¹³⁹, (p.122) questionnaires are the most common instrument for measuring HRM constructs. Twelve weeks period (October 2019 to December 2019) was utilized to collect the sample responses, using online/face to face questionnaire method, utilizing convenience sampling method consistent with the approach used by many previous studies on HRM practices^{140,141,142,143}

While, analyzing the sample for missing values, during data screening process, resulted to remove 22 incomplete responses, and then checked for potential multivariate outliers. The Chi-square distance value (D^2) from the centroid at 99.99% CI ($p < .001$) remained the measure for detecting multivariate outliers¹⁴⁴, therefore utilizing it resulted in 43 sure Multivariate outliers with $D^2 < 0.001$ as suggested by Tabachnick¹⁴⁵(pg.74) and Hair¹⁴⁶(p.65). Therefore, 65 invalid responses were removed resulting in final sample count of 303.

Measures and Scale Reliability

The hypothesized model was tested which is shown in figure 2, for which an adapted measurement tool was prepared by utilizing the scales from previously established studies. A 5-point Likert scale ranging from 1 as Strongly Disagree – 5 as Strongly Agree was used for measuring the attributes of studied variables.

Quality

This variable referred to as first competitive priority in this study means the quality of operations and services provide by banks. To measure the variable ten items scale was

¹³⁹ Chanda, A., & Shen, J. (2009). *HRM strategic integration and organizational performance*. SAGE Publications India.

¹⁴⁰ Cooke, F. L. (2009). A decade of transformation of HRM in China: A review of literature and suggestions for future studies. *Asia Pacific Journal of Human Resources*, 47(1), 6-40.

¹⁴¹ Thang, N. N., Quang, T., & Buyens, D. (2010). The relationship between training and firm performance: a literature review. *Research and practice in human resource management*, 18(1), 28-45.

¹⁴² Murphy, G. D., & Southey, G. (2003). High performance work practices: perceived determinants of adoption and the role of the HR practitioner. *Personnel Review*, 32(1), 73-92.

¹⁴³ Huselid, M. A., & Becker, B. E. (2000). Comment on "measurement error in research on human resources and firm performance: How much error is there and how does it influence effects size estimates?" by Gerhart, Wright, Mc Mahan, and Snell. *Personnel Psychology*, 53(4), 835-854.

¹⁴⁴ Tabachnick, B. G., & Fidell, L. S. (2007). Using multivariate statistics, 3, 402- 407.

¹⁴⁵ *Ibid.*

¹⁴⁶ Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). Multivariate data analysis: A global perspective (Vol. 7).

adapted from the studies of Challis¹⁴⁷ & Hoque¹⁴⁸ e.g., “We have much less lost time due to technical accidents than our competitors,” As achieving high quality is a good strategy in Operational performance management. These items were rated on five-point Likert scales ranging from (1) strongly disagree to (5) strongly agree. The internal consistency coefficient (Cronbach Alpha) for this scale was 0.862.

Flexibility

The second competitive priority used a dependent variable in this study referred as flexibility in the banking operations in order to provide best services to the customers and achieve optimum performance. To measure Flexibility variable, it was measured through six items adapted from Ngo¹⁴⁹. Sample item included “we often transfer employees who have the skills needed in other areas within the company”. The Cronbach Alpha for this scale was 0.860.

The following five HRM practices which are mostly researched by were shortlisted from the list of twenty-six (26) practices provided by Boselie *et al.* (2005) as predictors in the study:

Recruitment and selection

The scale of Recruitment and selection was measured through 12 items adapted from Hoque¹⁵⁰ and Kundu¹⁵¹, while internal consistency coefficient for the present study remained 0.940. Sample item included “We use pre-recruitment written tests”.

Performance Appraisal/ Evaluation (PA)

The scale of Performance evaluation scale was taken from the studies of Kundu¹⁵² and Ngo¹⁵³ measured through 12 items. One of the ample item included “the assessment criteria of performance evaluation are shared among employees”. The consistency coefficient of this scale was calculated as 0.915 for the current study sample.

Training and Development (TD)

Cronbach alpha for Training and development factor in this study was 0.871, measured

¹⁴⁷ Challis, D., Samson, D., & Lawson, B. (2005). Impact of technological, organizational and human resource investments on employee and manufacturing performance: Australian and New Zealand evidence. *International Journal of Production Research*, 43(1), 81–107.

¹⁴⁸ Hoque, K. (1999). Human resource management and performance in the UK hotel industry. *British Journal of Industrial Relations*, 37(3), 419–443.

¹⁴⁹ Ngo, H.-Y., Turban, D., Lau, C.-M., & Lui, S.-Y. (1998). Human resource practices and firm performance of multinational corporations: Influences of country origin. *The International Journal of Human Resource Management*, 9(4), 632–652.

¹⁵⁰ Hoque, Human resource management and performance, 18

¹⁵¹ Kundu, S. C., & Malhan, D. (2007). HRM practices in insurance companies: A study of Indian and multinational companies. In Proceedings of the 13th Asia Pacific Management Conference, 2007, Melbourne, Australia (pp. 472–488).

¹⁵² *Ibid.*

¹⁵³ NGO, Human resource practices, 19.

through 12 items and adapted from^{154,155,156}; sample item include “We conduct Training Needs Assessment(TNA) before designing a training program”.

Compensation and Reward (CR)

The scale for Compensation and Reward factor was adapted from work of Kundu¹⁵⁷ and Ngo¹⁵⁸. Factor was measured through 12 items; include an item “we use incentives to boost individual performance”. The ‘ ’ coefficient measuring internal consistency for compensation and reward was 0.831.

Career Opportunity within Organization

The scales of Career Opportunity within Organization were measured using 6 measurement items adapted from Akhtar¹⁵⁹and Ngo¹⁶⁰. Sample item included “Management provides career paths to all concerned within the organization”. The Cronbach Alpha() for Career opportunity within organization was calculated as 0.930.

Hair^{161,162}suggested more the Cronbach’s coefficient () closer to 1.0; it indicates greater internal consistency among the measurement items of the scale. As table no.1 provided shows the computed cronbach’s coefficient for all factors respectively and also the overall reliability. Joseph¹⁶³, emphasized to calculate and report cronbach’s alpha coefficient() for identifying internal consistency among any scales or subscales especially when applying Likert-type scales.

Common Method. Biasness(CMV)

Common method variance (CMV) biasness was checked using both procedural and statistical methods. Initially it was ensured that the respondents were given clear instructions regarding responses; avoid ambiguous and complicated wordings in the survey tool to make sure responses were obtained without any biasness¹⁶⁴. Therefore, Harman’s single factor test was applied on the collected data; EFA was run utilizing un-rotated factor solution by fixing all variables to only single factor so as to detect any presence of CMV, by Reio¹⁶⁵. The results showed only 33% variance explained by all

¹⁵⁴ *Ibid*, pg19

¹⁵⁵ Akhtar, Strategic human resource management, 3.

¹⁵⁶ Kundu, HRM practices, 22.

¹⁵⁷ *Ibid*.

¹⁵⁸ NGO, Human resource practices, 19.

¹⁵⁹ Akhtar, Strategic human resource management, 3.

¹⁶⁰ NGO, Human resource practices, 19.

¹⁶¹ Hair, Multivariate data analysis, 18.

¹⁶² Hair, J. F., Babin, B., Money, A. H., &Samouel, P. (2003). Essentials of business methods research.

¹⁶³ *Ibid*.

¹⁶⁴ Reio, T. G. (2010). The threat of common method variance bias to theory building. *HumanResource Development Review*, 9(4), 405-411.

¹⁶⁵ *Ibid*.

items, which was less (< 50%)¹⁶⁶ ensuring little evidence for CMV existence.

Data Analysis and Results

In the current study multi-variate analysis (MVA) was done with minimum researchers' interference in Non-Contrived settings in order to test the relationships between HR practices and Operations performance predicted using two competitive priorities. The researchers have used two statistical softwares: SPSS-21.0 and Amos-21 for the study analysis. Following four steps had been carried for statistical analyses:

1. Exploratory factor analysis(EFA) was performed; as Pilot testing to get the most refined factors within the context of study; therefore after testing scales,
2. The another data set was then Initially checked for Multivariate analysis assumptions in order to uncover any violations;
3. As second step Hypothesized measurement model was tested by performing confirmatory factor analysis(CFA), so that to establish the finally retained items in step no. 1 existed as a good fit to the final study data set of 303;
4. Lastly, Structural equation analysis (SEM) was performed.

Table no.1 includes descriptive of the five (5) study variables. It was found that highest correlation value was 0.57 between variables Quality and recruitment & selection, thus no issue of multicollinearity exists among the model variables (all values <than 0.90)^{167,168}. Also data results showed most of the variables accumulated higher scores of the scale, implying largely the data were negatively skewed.

¹⁶⁶ Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.

¹⁶⁷ Hair, Multivariate data analysis, 18.

¹⁶⁸ Lin, Impact of organizational learning, 12.

Table 1: Means, Standard Deviations, Cronbach Alpha and Pearson Correlations

| Variables | Mean | St. Dev | Ca | QU | RS | TD | CR | PA | FL | CO |
|-------------------------|-------|---------|-------|--------|--------|--------|--------|--------|--------|----|
| Quality | 3.123 | 0.919 | 0.862 | - | | | | | | |
| Recruitment & Selection | 2.903 | 1.181 | 0.940 | .570** | - | | | | | |
| Training & Development | 2.732 | 0.881 | 0.871 | .524** | .399** | - | | | | |
| Compensation & Reward | 2.277 | 0.695 | 0.831 | .126* | | .139* | .196** | - | | |
| Performance Appraisal | 3.210 | 0.980 | 0.915 | .551** | .512** | .469** | 0.07 | | - | |
| Flexibility | 2.798 | 1.024 | 0.860 | .216** | .222** | .205** | .143* | .411** | | - |
| Career Opportunity | 3.066 | 1.320 | 0.930 | .189** | .089 | .188** | .141* | .243** | .406** | - |

Note: Overall reliability of 50 finally loaded items was found as 0.938
Source: Authors Estimation

Exploratory Factor Analysis

The authors also tested for EFA initially using a separate dataset, to get the most refined and related items with respect to the study context to obtain the most concise representation of dimensions. In this study the principal components method was applied which have been applied in many previous empirical studies^{169,170,171} to extract seventy(70) Likert-based items into seven refined hypothesized factors. The adequacy of the sample was measured utilizing Kaiser.-Meyer.-Olkin which exhibit 0.892 value(>0.7) as suggested by Kaiser; thus ensure having adequate items to predict each required component and run factor analysis^{172,173}. Result of Bartlett's test of sphericity(Approx. Chi - Square =10343.16, df =1225, p***) explains correlation matrix is significantly distinct with the identity.matrix and also shows correlation is not zero among variables¹⁷⁴.

The authors utilized three tests; Latent root, percentage of variance explained and scree test for extracting the final factors, suggested by Hair¹⁷⁵, which ultimately ended as seven factors finally retained for further analysis. The retained seven factors, with 50 items retained having appropriate factor loadings with >0.50 values were successful in explaining 62.25% of the total variance. Now these finally retained measurement items were adequate to run the measurement model for predicting and testing the study

¹⁶⁹ Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate behavioral research*, 25(2), 173-180.

¹⁷⁰ Spector, P. E. (1994)., Using self-report questionnaires in OB research: a comment on the use of a controversial method. *Journal of Organizational Behavior*, 15(5), 385-392.

¹⁷¹ Velicer, W. F., & Jackson, D. N. (1990). Component analysis versus common factor analysis: Some issues in selecting an appropriate procedure. *Multivariate behavioral research*, 25(1), 1-28.

¹⁷² Barrett, P. (2007), "Structural Equation Modelling: Adjudging Model Fit," *Personality and Individual Differences*, 42 (5), 815-24.

¹⁷³ Foster, J. J., Barkus, E., &Yavorsky, C. (2005). *Understanding and using advanced statistics: A practical guide for students*. Sage.

¹⁷⁴ Hair, *Multivariate data analysis*, 18.

¹⁷⁵ *Ibid.*

hypotheses within the context of banking sector of Karachi.

Table 2: Component Transformation Matrix

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Recruitment & Selection | .585 | .529 | .422 | .087 | .167 | .225 | .338 |
| Performance Appraisal | -.560 | .145 | .142 | .556 | .448 | .366 | -.043 |
| Training & Development | -.127 | -.176 | .538 | -.451 | -.416 | -.482 | .235 |
| Compensation and Reward | .221 | -.692 | .280 | -.108 | .604 | -.057 | .119 |
| Career within Organization | .427 | -.223 | -.566 | .650 | -.056 | .059 | .136 |
| Flexibility | .191 | -.298 | .329 | .075 | -.397 | .597 | -.497 |
| Quality | .245 | .225 | .074 | .202 | .271 | -.470 | -.741 |

Source: Authors Estimation

Confirmatory Factor Analysis (CFA)

For the second and larger data set the 1st-order measurement model(MM) was confirmed and finally retaining 49 loaded items represented seven factors: Quality (QU), Flexibility (FL), Recruitment and Selection (RS), Career within organization (CO), Training & Development (TD), Performance Appraisal (PA) and Compensation & Reward (CR) using AMOS software. CFA-MM relies on various assessment indices for model fitness which predicts the relationship between unobserved and observed variables^{176,177}.

Table 3: Fitness of Measurement model (CFA)

| Goodness of Fit Measures | CMIN/DF | (P-value) | TLI | CFI | RMSEA (PCLOSE) |
|--------------------------|-----------------|-----------|-------------------------|---------------------|-----------------------------|
| Recommended Value | <5 ^a | (n-sig) | Close to 1 ^c | ≥ 0.95 ^b | ≤ 0.05 (≥ .05) ^d |
| Measurement Model | 1.88 | (Sig) | 0.90 | 0.90 | 0.05 (1.0) |

Notes: a = Byrne (2010); b = Bagozzi and Yi (1988); c = Bentler (1990); d = Steiger 2007

The present research reported Chi-Square test, the Root Mean Square Error (RMSEA), the Comparative Fit Index (CFI) and Tucker Lewis Index (TLI) to report model

¹⁷⁶ Byrne, B.M. (1998), Structural Equation Modeling with LISREL, PRELIS and SIMPLIS: Basic Concepts, Applications and Programming. Mahwah, New Jersey: Lawrence Erlbaum Associates.

¹⁷⁷ -----, (2013). Structural equation modeling with AMOS: Basic concepts, applications, and programming. Routledge.

fitness. The result of analysis shows that our Relative chi-square value is 1.88 and shows an acceptable good fit with significance value $p=.000$, in models with 75 - 200 cases chi square test remains a reasonable measure of fit while for models >200 cases, chi square is almost always found significant^{178,179}. Therefore as chi-Square is sensitive with respect to sample size; Kline¹⁸⁰ suggested that in order to achieve better goodness of fit, chi-Square value shall be divided by degrees of freedom (df) called: Normed Chisquare or CMIN/df value with threshold <5 ¹⁸¹. In our case it is 1.885 and fits the goodness of fit criterion. The RMSEA value for our final hypothesized model is 0.05 which is less than 0.07 criteria provided by Steiger¹⁸². Lastly, the CFI (0.90) and TLI (0.90) values in our measurement model also fulfill the goodness of fit criteria (as per Bagozzi¹⁸³ & Byrne¹⁸⁴). The results values produced using the CFA model fit indices, as suggested by Byrne^{185,186} (1998:2013) emerges as a very good fit between the unobserved and observed variables (CFA=MM).

Internal Consistency and Validity

The present study also performed the critical examination of discriminant and convergent types of validity and reliability. As discriminant validity ensures that measurement items shouldn't correlate with those variables with whom they shall not^{187,188}. The resulting solution in Table 2 and 3, show there is no cross loadings among the remaining items; also the values were less than 0.7 in component transformation matrix¹⁸⁹. This indicates that the study has no issue of discriminant validity.

¹⁷⁸ Tanaka, J. S. (1987). "How big is big enough?": Sample size and goodness of fit in structural equation models with latent variables. *Child development*, 134-146.

¹⁷⁹ Tabachnick, Using multivariate, 18.

¹⁸⁰ Kline, R.B. (2011), Principles and Practice of Structural Equation Modeling (2nd Edition ed.). New York: The Guilford Press.

¹⁸¹ Byrne, Structural Equation Modeling with AMOS, 24.

¹⁸² Steiger, Structural model evaluation, 22.

¹⁸³ Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16(1), 74-94.

¹⁸⁴ Byrne, Structural Equation Modeling with AMOS, 24.

¹⁸⁵ Byrne, Structural Equation Modeling with LISREL, 24

¹⁸⁶ Byrne, Structural Equation Modeling with AMOS, 24.

¹⁸⁷ Afshan, S., & Sharif, A. (2016). Acceptance of mobile banking framework in Pakistan. *Telematics and Informatics*, 33(2), 370-387.

¹⁸⁸ Waseem, S. N., & Mehmood, K. (2019). A Study on the Drivers of Employee Engagement and its Relationship with Employee Performance. *South Asian Journal of Management*, 13(2), 172-190.

¹⁸⁹ Tharenou, P., Donohue, R., & Cooper, B. (2007). *Management research methods*. Cambridge University Press.

Table 4: Cronbach alpha (C α), composite reliability (CR) and average variance explained (AVE).

| | CR | AVE | C(α) |
|----|-------|-------|---------------|
| QU | 0.865 | 0.521 | 0.862 |
| FL | 0.860 | 0.553 | 0.860 |
| PA | 0.919 | 0.588 | 0.915 |
| CO | 0.921 | 0.745 | 0.930 |
| RS | 0.942 | 0.621 | 0.940 |
| TD | 0.872 | 0.433 | 0.871 |
| CR | 0.829 | 0.414 | 0.831 |

Source: Authors Estimation

If an instrument correlates highly with the variables with which it should correlate theoretically, then it ensures convergent type of validity^{190,191}. Table 5 presents the values of Cronbach alpha(C α), composite reliability (CR) and average variance explained (AVE) for all constructs. The results suggested good reliability (above thresholds) suggested by Nunnally¹⁹² and Bagozzi¹⁹³. The AVE values of all the variables are also above the recommended values of 0.5 except TD and CR. Overall reliability results reflects a good fit MM as shown above in Table 4. ¹⁹⁴.

Structural Analysis and Hypothesis Testing:

Structural Equation model (SEM) was carried to test the models' Goodness of, Fit, results for SEM are showed in Table no.6, including goodness of fit assessed by CMIN/DF-value = 1.9, TLI-value = 0.88, CFI-value = 0.9 and RMSEA of 0.05. Thus, threshold levels as suggested by Byrne¹⁹⁵were achieved as shown above which indicates a good fit model for the given study.

¹⁹⁰ Waseem, A Study on the Drivers, 25.

¹⁹¹ Afshan, Acceptance of mobile, 25.

¹⁹² Nunnally, J. C. (1994). *Psychometric theory 3E*. Tata McGraw-hill education.

¹⁹³ Bagozzi, R. P., & Yi, Y. (1988). On the evaluation, 24.

¹⁹⁴ Byrne, Structural Equation Modeling with AMOS, 24.

¹⁹⁵ *Ibid.*

Table 5: Fitness of Measurement model (SEM)

| Goodness of Fit Measures | CMIN/DF | (P-value) | TLI | CFI | RMSEA (PCLOSE) |
|--------------------------|-----------------|-----------|-------------------------|---------------------|---------------------------|
| Recommended Value | <5 ^a | (in-sig) | Close to 1 ^c | ≥ 0.95 ^b | ≤ .05(≥ .05) ^d |
| Measurement Model | 1.90 | (Sig) | 0.88 | 0.90 | 0.05 (1.0) |

Notes: a = Byrne (2010); b = Bagozzi and Yi (1988); c = Bentler (1990); d = Steiger 2007

Source: Authors Estimation

All determinant factors produced statistical significance which establishes the validity of hypothesized regression paths. Table no.6 projected SEM regression paths results including critical ratios, standardized regression weights, probability values, standard errors and comments on hypotheses. Study results suggested significant but positive impact of Training & development(TD), Recruitment & Selection(RS), Performance Appraisal(PA), Career within Organization(CO) and Compensation and Reward(CR) with Quality(QU) of bank's operations.

With one unit increase in the standard deviation(SD) of TD, RS, PA, CO and CR will increase QU by .24, .24, .18, .05 and .14 unit of SD respectively. The variable flexibility (FL) of operations was found to have significant influence of Performance Appraisal (PA) and Career within Organization (CO). This highlights a unit increase in SD of PA and CO will increase the FL by 0.30 and 0.20 units of standard deviation.respectively.

Table 6: SEM Hypotheses Testing

| Hypothesis | Hypothesized Path | Estimate | S.E. | C.R. | Prob. | Remarks | |
|------------|-------------------|----------|--------|-------|--------|---------|----------|
| 1b | QU | TD | 0.237 | 0.056 | 4.204 | *** | Accepted |
| 4b | QU | RS | 0.245 | 0.04 | 6.062 | *** | Accepted |
| 3b | QU | PA | 0.178 | 0.046 | 3.864 | *** | Accepted |
| 5b | QU | CO | 0.053 | 0.023 | 2.348 | 0.019 | Accepted |
| 2b | QU | CR | 0.144 | 0.049 | 2.941 | 0.003 | Accepted |
| 1a | FL | TD | -0.094 | 0.068 | -1.388 | 0.165 | Rejected |
| 4a | FL | RS | 0.044 | 0.044 | 0.987 | 0.324 | Rejected |
| 3a | FL | PA | 0.296 | 0.063 | 4.722 | *** | Accepted |
| 5a | FL | CO | 0.198 | 0.033 | 5.994 | *** | Accepted |
| 2a | FL | CR | 0.085 | 0.063 | 1.354 | 0.176 | Rejected |

The achieved results concludes that hypotheses regarding influence of Training.& development(TD), Recruitment and Selection(RS), Performance Appraisal(PA), Career within Organization(CO) and Compensation and Reward(CR) on Quality(QU) of bank's operations are supported in the present study. As for flexibility(FL) of operations, only performance appraisals(PA) and career within organizations(CO) are found to be critical in banking sector of Pakistan.

Discussion of Results

Relationship nature was studied between Strategic HR practices and Operational parameters within the Banking Sector of Pakistan. The confirmatory analysis provides that the model is acceptable, while demonstrating low discrepancy over degree of freedom(df) with CMIN value 1.884, p=0.00 showing a good model fit. Further, Structural analysis model further strengthens the theoretical approach of the propositions that Human resources related practices do have practical and meaningful influence upon the competitive priorities of an organization i.e. flexibility and quality of operations.

Performance appraisal as first independent variable was statistically significant as predicting the DVs i.e. operations' flexibility ($\beta = 0.296^{***}$) and quality ($\beta = 0.178^{***}$) as supported by previous studies^{196,197,198}. The performance appraisal techniques are by large primitive as they are dependent upon the evaluation of the senior management, which makes employees unaware about the key performance indicators on the basis of which they are evaluated. But fortunately, in the banking sector of Pakistan there are formal established ways of apprising the employees at all management levels, which accounts for their promotions or further career decisions. As managers it is important to apply 360° feedback processes so that fair evaluation is done and employees remain satisfied by their future growth.

The study further shows Training & Development has a +ve significant impact on Quality ($\beta = 0.237^{***}$) where as an insignificant impact on Flexibility ($\beta = -0.094$) supported by the study conducted by Karthi and Graf¹⁹⁹ and Gronroos²⁰⁰. Banks should provide needs based trainings specifically aimed for enhancing the employees' skills so as to improve quality of operations and job related performances.

Similarly, Recruitment and selection practices has been found a statistically insignificant predictor for the banking operations flexibility ($\beta = 0.044$) and significant predictor of quality of services ($\beta = 0.245^{***}$) provided in the banks of Karachi. It is therefore, important for banking management to incorporate the strategic importance of recruitment and selection activities for successful personnel management. All banking organizations in Pakistan shall evaluate the selection methods on different criteria's including reliability, fairness and validity of these practices which ultimately lead them to ensure long term success in organizations, a practice followed by all professional organizations. As human resource is the most valuable asset for any organization and a critical success factor for any enterprise, therefore this first dimension of SHRM should be given due importance.

Furthermore, Career within organization has a positive significant impact on Quality ($\beta = 0.053^*$) and Flexibility ($\beta = 0.198^{***}$). Therefore, banks need to increase their focus on the career growth of the employees so as to increase employee satisfaction and retention.

Lastly, Compensation and Rewards has a positive significant impact on Quality ($\beta = 0.144^{**}$) and insignificant impact on Flexibility ($\beta = 0.085$) which supports the study conducted by Paul & Anantharaman²⁰¹. For employees pay is an important variable. An individual needs to be justifiably paid according to their expertise and their responsibilities.

Managerial Implications

Thus all these results have important implications for HR managers, as it is obvious that integration of HR functions in align with banks' strategic competitive priorities will help

¹⁹⁶ Sanchez, Strategic flexibility, 4.

¹⁹⁷ Quresh, Do human resource management practices, 7.

¹⁹⁸ Collings, Strategic orientation, 11.

¹⁹⁹ Karthi, Impact of Training, 9.

²⁰⁰ Grönroos, Service management, 9.

²⁰¹ Paul, Impact of people, 8.

achieve multiple goals among which superior performance is the most dominant one. It is also imperative for HR managers to develop employees' commitment through better practices of HR related functions. Good HR policies inculcate freedom of speech, boost employees confidence in sharing and suggesting organizations developments via improving various operational priorities. Banking sector being the backbone of any economy, need to focus on improving operational flexibility and thus the quality of operations by integrating strategic HR functions. The current study also highlights a clear perceptiveness of, the need of HR managers' acceptance and active participation in devising and implementing strategic HR policies and procedures so as to achieve the superior competitive performance.

Future Research

Firstly, future researches are suggested to carry out studies to further assure the linkage between HRM and operational performances in service sectors of Pakistan including banks as well, especially because very limited studies have been carried out in Pakistan so far. Secondly, the studies are suggested to be carried as longitudinal study to find out the real impact of causal relationship of the theory. Third, there are no uniform measures to study the constructs HRM and OM to generalize the findings across other industries or sectors, almost all studies have been carried out in different ways with different dimensions. In future conceptual researches should be carried out to generalize the dimensions of the constructs. Lastly, the future studies could be carried out with the inclusion of contextual variables moderating the association amid HRM and operations performances. Further, the reliability of this study was checked and ensured, any future research can also be carried out to ensure the validity of this study either with this same population or different sector. Banking context was used to carry this study; other sectors of Pakistan could also be studied with regards to the impact of HRM on operational performances.

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