

EFFECT OF HUMAN RESOURCE MANAGEMENT PRACTICES ON PROJECT SUCCESS IN PAKISTAN ORDNANCE FACTORIES– AN EMPIRICAL EVIDENCE FROM POF WAH

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ABSTRACT

This paper aims at examining the influence of four Human Resource Management (HRM) practices including Recruitment & Selection, Training & Development, Performance Appraisal, and Compensation on project success in the Pakistan Ordnance Industry. The study is explanatory in which the deductive approach was adopted; hypotheses were developed after reviewing relevant literature. Primary data were gathered from 264 respondents using an adapted questionnaire which has been further analyzed by adopting statistical techniques containing Pearson's Correlation and Regression with the help of Statistical Package for Social Sciences (SPSS). Results of the study indicate that three factors (recruitment & selection, training & development, and performance appraisal) out of the four predictors have a positive and noteworthy influence on project success whereas the impact of the compensation is not substantial. The findings of the study are considered quite useful for the management of POFs in particular and the entire Ordnance Industry in general. The study is equally beneficial for other

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INTRODUCTION

In the present dynamic era, one of the important factors of organizational effectiveness and project success is the employee performance which can provide a clear winning edge to the firms. For the progress of almost all leading organizations, human resources are considered to be the most central constituents. Organizational success and retention of superior performers depend upon high level of motivation through multiple benefits and rewards (Watson, 2018). It is important for an organization to achieve employee loyalty through motivation. According to Bird & Frug (2019), organizational effectiveness and employee retention are dependent upon conducive work environment and better compensation. In the context of the Ordnance Industry, human resources are even more significant due to the peculiar nature of the job wherein the development of modern arms and ammunition is undertaken through various projects. Pakistan Ordnance Factories (POFs) are housed in Pakistan's largest Defence Engineering Complex located near Wah cantonment near Taxila, under the Ministry of Defence, Pakistan. The complex encompasses 14 ordnance factories, three commercial subsidiaries with 27,000 employees. Many projects are undertaken concurrently for developing innovative solutions related to arms and ammunition. To complete various projects, the workforce has to be competent and committed to working in a dangerous environment (Imran, Luqman & Zaki, 2016). In a rapidly changing technological environment, organizations need employees who are professionally competent and motivated enough for achieving superior performance (Raineri, 2017). Managing human resource performance is an area of prime apprehension for the managers to achieve organizational objectives (Mohammad, Osman, & Edris, 2014). As organizations are progressively depending on employee performance in the highly competitive market, because of this milieu, it is imperative to focus on the management practices related to human resources (Burma, 2014), because it leads to affect the performance at individual as well as organizational level. In the same vein, Lengnick-Hall et al. (2009) & Caldwell (2008) have asserted that HR practices play a central role in enhancing the effectiveness of HR professionals in achieving the competitive advantage by demonstrating a higher level of performance. In POFs, indigenous development of modern arms and ammunition is often undertaken through projects by in-house teams. Problems do exist regarding the inadequate execution of HRM practices by the management. In case of inappropriate recruitment burdened with bureaucratic influences, less competent workers are hired;

if these workers are not suitably trained before putting them on the job, there are also chances of compromise on quality and cost. Similarly, if performance appraisal is not conducted properly and when employees are not suitably compensated according to their competence and productivity, employee retention and projects' success cannot be ensured (Wambua, 2013). This paper examines four HRM practices being followed at POFs such as recruitment & selection, training & development, performance appraisal, and compensation and examines the contribution of these practices on project success. Therefore, the objectives of this study are appended below:

- To find out the influence of recruitment & selection on project success at POFs.
- To inspect the effect of training & development on project success at POFs.
- To determine the performance appraisal effect on project success at POFs.
- To examine the impact of compensation on project success at POFs.
- To propose measures for further improving the effectiveness of projects at POFs.

Literature Review

Project Success

A project includes an organized, unique, and time-bound work to achieve a pre-defined goal or objective. The traditional components to be considered for ascertaining the success of a project include time, cost, and quality (Baccarini, 2011). Accordingly, project success encompasses the management of projects related to the processes and criteria for satisfying project on time with the utilization of least cost, and quality for stakeholders. On the other pointer, criteria linked to product success include specifications of the product and the deliverables along with the attainment of strategic objectives for the satisfying need of different stakeholders (Collins & Baccarini, 2004). As such, human resource as an important stakeholder within the organization plays a crucial role in augmenting project performance (Imran et al., 2016). In a project, performance refers to what is accomplished by the human resource in terms of quality & quantity of yield, timeliness, and within allocated budget (Shahzadi, Javed, Pirzada, Nasreen, & Khanam, 2014). Similarly, Rafique, Raza & Imran, (2017) described the performance as an employee's capability to contribute through his work by accomplishing targets and goals specified in a project. Therefore, project performance is related to individuals' performance who work for a designated project (Koshy & Suguna, 2014). Mir & Pinnington (2014) have specified that project success is linked with the individual propensity to perform efficiently by gaining the edge over others through improving their technological infrastructure.

Project success can be assessed through the completion of the project within defined boundaries formed by a functional component and not the individual uniqueness who perform the project (Rafique et al., 2017). Project success mainly depends on how efficiently and effectively talent and skills the project team is utilized to achieve the project goals and objectives (Sarwar, Aftab, & Shahid, 2016). To maximize the probability of project success, organizations need to attain certain standards at both firm and individual levels by utilizing the most influential factor i.e. human resources (Çalışkan, 2010; Muda et al., 2014). In the highly competitive market, employees play a decisive role to achieve optimum success in the project (Inuwa, 2016). In the competitive project environment, organizations essentially need to hone human resource capabilities to enhance project success. Effective implementation of HRM practices plays a significant role in making a favorable environment for completing the projects successfully (Ansari, Haq, & Raza, 2017). Human Resource Management (HRM) Practices plays a significant role in making a favorable environment for completing the projects successfully (Ansari, Haq, & Raza, 2017).

Human Resource Management (HRM) Practices

The achievement of any organization hangs on efficient human resources working in it (Mankikar, 2014). Management of human resources has become a top priority for firms seeking to achieve a competitive lead in the highly agile and globally competitive business environment. The workforce plays a key role in achieving desired objectives of the organization and implementation of HRM practices are means to end (Kerdpitak & Jermisittiparsert, 2019, 2020). HRM process encompasses the recruitment & selection of competent employees together with the training & development, compensation, and performance appraisal to prompt employees to exhibit higher performance (Ahammad, 2017). Correspondingly, Tabouli, Habtoor, & Nashief (2016) have argued that to improve the project as well as employee performance, organizations must pay attention to HRM policies and practices. So, human resource management is considered a tool to assess competence along with that improving the capabilities of human resources (Burma, 2014), result in improving the performance of an individual. Consistently, HRM practices are valuable for both employees and organization for instance, at the employee level performance as well as satisfaction level be increased. On the other side, for an organization, these practices are beneficial because it results in improving the success chances as well as competitive lead (Shin & Konrad, 2017). Therefore, management practices contribute profoundly in achieving organizational goals through enhancing skills and capabilities of employees needed to improve performance and growth of the organization (Cosack, Guthridge, Lawson, 2010; Dobre, 2013), via enhancing the quality of service (Ueno, 2014), and performance of employees (Mohammad et al., 2014). Whereas, Fatema (2018)

worked out that HR practices are primarily highly influential factors that result due to effective implementation of practices like compensation, recruitment & selection, training & development, and performance appraisal which in turn determine the performance of an organization. Along with that Yang, Chen, Wu, Huang, & Cheng, (2015) explicated that effective implementation of HR practices results in increasing the chances of success related to the project.

Recruitment and Selection

Abdul Quddus (2015) advocated that recruitment and selection of the right human resource matching with the criteria specified in the selection process through matching the skills of an individual for the intended position are vital functions for successful organizations (Clarke, 2011). Consistently, recruitment is to attract qualified, experienced, and skilled people to suit the present and future requirements of an organization (Breugh, 2016). Whereas the selection process identifies the workforce required to accomplish the organization's mission, work requirements and to obtain the 'best fit' for a job by using different methods for assessment of employees (Breugh, 2016; Myrna, 2008). In the parallel vein, Adu-Darkoh (2014) explicated that selection decision become more significant when the organizations are confronted with competitive labor markets by examining the potential candidates, however, it is well rewarded in terms of achieving the organizational success (Bogatova, 2017; Nasreem, Hassan & Khan, 2016).

Training and Development

Training is considered an important HR function to improve the knowledge, skills, and attitude of an individual to meet the current needs of a job. While, development is the systematic effort to enhance the knowledge and skill of people for future job requirements (Vinesh, 2014). Keeping in view the significance of training and development learning organizations are more focused on training and developing their human resource mainly to secure market competitive advantage (Bajpai, 2009), result in adding value for organizations to achieve its specified projects successfully (Niazi, 2011). Consistent with this argument, training and development help in the attainment of competitive advantage in the agile global market conditions (Vinesh 2014), result in improving employee performance and motivational level to complete the projects efficiently (Ansari et al., 2017). Accordingly, training and development play a noteworthy role to improve the efficiency of human resources which in turn affects project success (Ahmed & Kolachi, 2013). So, training supports organizations to remain competitive by continually refining employees knowledge & skills (Kilmartin, 2015; Salas, Tannenbaum, Kraiger, & Smith-Jentsch, 2012), and

also help in achieving the organizational objectives via an effective relationship between employee and employer (Chughtai & Nadeem, 2015; Kirkpatrick, 2014; Long, Kowang, Chin, & Hee, 2016; Miller & Diana, 2002). Similarly, training as well as development aligns learning activities with the corporate strategy (Niazi, 2011), result in improving the success rate of an organization.

Performance Appraisal

A performance appraisal system is demarcated as an interactive process of determining the performance of an employee for performing his job (Aggarwal & Thakur, 2013). Performance appraisal is the dynamic practice for the management of human resources used in firms to assess and rate employee performance by evaluating progress towards the accomplishment of desired targets (Owoyemi & George, 2013). A performance appraisal measures job-related behavior by determining how an employee is performing presently on the job and how performance can be enhanced for the future (Mehreza & Alamirib, 2019). Therefore, performance appraisal is an effective instrument to assess the performance outlines established by an organization for its workers over the period (Daoanis, 2012; Koshy & Suguna, 2014). Also, performance appraisal is an instrument to communicate values by encouraging flexibility among the employees to take full advantage of individual potential to attain the targets (Kampkötter, 2017). Accordingly, performance appraisal is one of the significant tools of managing human resource systematically (Abuazoom, Hanifi & Ahmed, 2017; Sopiah, 2016; Kumar, Rakesh, Anjum, & Sinha, 2011), to achieve competitive advantage for an organization by assessing the efficiency and effectiveness of employees (Koshy & Suguna, 2014), as a result of this assessment gaps can be fulfilled to complete the project on time (Shaharyar, Baloch, Tariq, Mushtaq, & Mushtaq, 2014). Contrary to that, performance appraisal practice has been criticized due to biases in assessment showed by managers along with the absence of timely feedback to employees (Bekele, Shigutu, & Tensay, 2014; Dessler, 2013). According to Rubel & Kee (2015), impartiality in the performance appraisal process is necessary to distinguish performing employees from non-performing workers based on their performance ultimately lead to enhancing customer satisfaction as well as success of projects happening in the organization (Sippy & Varma, 2014; Singh & Rana, 2013).

Compensation

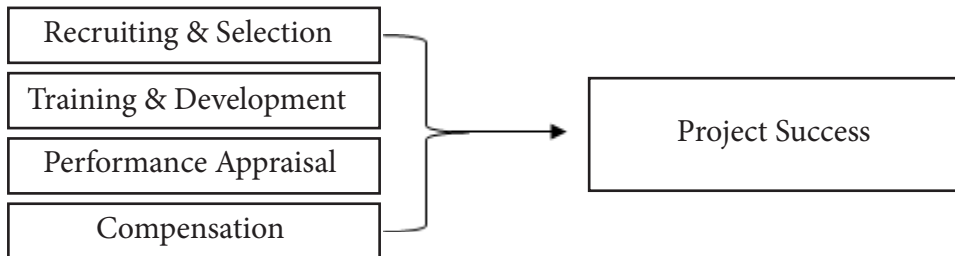
According to Premalatha (2013), compensation is defined as the remuneration or reward given to people in return for the work done and services delivered for the organization as an employee devotes time, and effort (Osibanjo & Adeniji, 2012). Moreover, Dessler (2013) advocated that compensation comprises two key com-

ponents i.e. direct and indirect compensation. Direct compensation includes salary, commission, bonuses, and overtime. While, indirect compensation includes medical benefits, insurance, and vehicle loan, etc. (Osibanjo, Adeniji, Olubusayo, & Heirs-
mac, 2014). Furthermore, both forms of compensation can result in affecting the performance positively (Abdullah & Wan, 2013; Chiang & Birtch, 2012; Muhammad & Abdullah, 2016; Siramiati, Surachman, Hadiwidjojo, & Rohman, 2016; Vaiman & Vance, 2008)). Contrary to this, Bustamam, Teng, & Abdullah, (2014) recognized that lack of rewards or compensations can lessen employee efforts and affect the organizational success by providing compensation based on employee performance (Chiang & Birtch, 2012; Muhammad & Abdullah, 2016). Downes & Choi, (2014) argued that compensation also contributes to attract talented personnel as well as improve their performance for organizational outcomes which leads to affect not only motivation but also remains the utmost influential means for the success of an organizational project(Gupta & Shaw, 2014).

Theoretical Framework

Figure 1: Theoretical Framework

Theoretical Framework is based on the research variables, as indicated in figure 1.



Research Hypotheses

- H1: Recruitment & selection has a positive impact on project success.
- H2: Training & development has a positive impact on project success.
- H3: Performance appraisal has a positive impact on project success.
- H4: Compensation has a positive impact on project success.

RESEARCH METHODOLOGY

The type of this causal study is explanatory and descriptive for which deductive

approach was adopted; hypotheses were developed after studying relevant literature. The target population for this study included 2500 supervisor and higher-level employees working in the Pakistan Ordnance Factories (POFs) of Pakistan, Wah Cantt, Taxila. Although sample size for the target population came out to be 333 but 340 questionnaires were distributed. However, only 264 questionnaires were found correctly filled and useful for further analysis. The response rate was 77.6%. Convenient sampling technique was used based on availability of employees, for collection of primary quantitative data (Etikan, 2016). Research instrument of the study was a well-structured questionnaire. Validity of the instrument was also checked through pilot testing. The gathered data were analyzed through statistical tools, Pearson's correlation and regression analyses, with the help of SPSS software.

DATA ANALYSIS

Demographics of Respondents

Out of the 264 respondents, 162 employees were in scale 12-15 and 102 respondents were in 16 and above scale having education 24% undergraduates, 42.4% of graduates, and 29.5 % were masters. Among these 104 employees have working experience of more than 15 years, 226 male and 38 were female respondents.

Reliability Test - Cronbach's Alpha

The internal consistency of the items was checked by applying Cronbach's Alpha test. Reliability results indicate the Cronbach's Alpha for each variable has a value >0.7 which means the instrument used in the research is reliable.

Table 1: Cronbach's Alpha

Independent Variables	Cronbach's Alpha	Items
Recruitment and Selection	.785	5
Training & Development	.774	5
Performance Appraisal	.795	4
Compensation	.802	4
Project Success	.791	5

Correlation test

To find out the relationship of variables, multiple correlation test was applied. Fallouts are indicated in table 2, a correlation exists between the outcome variable

project success and the predictor variables recruitment & selection, training & development, compensation practices, and performance appraisal.

Table 2: Correlations

		RS	TD	PA	C	PS
Recruitment & Selection (RS)	Pearson Correlation	1	.469**	.141*	.283**	.345**
	Sig. (2-tailed)		.000	.022	.000	.000
	N		264	264	264	264
Training & V Development (TD)	Pearson Correlation		1	.464**	.360**	.400**
	Sig. (2-tailed)			.000	.000	.000
	N			264	264	264
Performance Appraisal (PA)	Pearson Correlation			1	.451**	.324**
	Sig. (2-tailed)				.000	.000
	N				264	264
Compensation (C)	Pearson Correlation				1	.291**
	Sig. (2-tailed)					.000
	N					264
Project Success (PS)	Pearson Correlation					1
	Sig. (2-tailed)					
	N					

** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed).

Linear Regression Analysis

Linear Regression was run to specify the impact of independent variables on the dependent.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. error of the Estimate
1	.478 ^a	.228	.216	.71934

As mentioned in table 3, the value of R shows a simple relationship-among the variables which is 0.478 indicating a moderate degree of correlation. R square value is 22.8% which denotes the dependent variable total variation that can be explained by independent variables. Hence, total impact of all IVs on project success is only 23%.

Table 4: Analysis of Variation (ANOVA)

Model		Sum of Squares	DF	Mean Square	F	Sig.
1	Regression	39.602	4	9.901	19.133	.000 ^b
	Residual	134.019	259	.517		
	Total	173.621	263			
a. Project Success: Dependent Variable						
b. Predictors: Recruitment and Selection, Training and Development, Performance Appraisal, Compensation						

The ANOVA table shows the correctness level that how the data fits in the regression equation via predicting the dependent variable. Therefore, in the above-mentioned table ‘Significance’ column indicates that the regression is substantial which forecasts the outcome (dependent) variable.

Table 5: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	Std. Error	Beta			
B					

1	(Constant)	1.337	.307		4.348	.000
	Recruiting & Selection	.210	.065	.204	3.235	.001
	Training & Development	.231	.082	.196	2.814	.005
	Performance Appraisal	.181	.073	.164	2.466	.014
	Compensation Practices	.076	.054	.089	1.409	.160

a. Dependent Variable: Project Success

Table 5 results show that increase in one unit of recruitment & selection results in an increase in project success by 0.21 units. Since the p-value is < 0.05 , consequently, the recruitment & selection effect on project success is observed. In the same way, one unit increase in training & development will fallouts in an increase in project success by 0.231 units. Meanwhile, the value of p is < 0.05 , therefore, the impact of training & development is significant on project success. Moreover, it also displays that one unit increase in performance appraisal will cause an increase in project success by 0.181 units. Since the p-value is < 0.05 , therefore, the impact of performance appraisal is significant on project success. Besides, one unit increase in compensation practice will cause an escalation in project success by 0.076 units. Since the p- value is > 0.05 , therefore, compensation has an insignificant impact on the project success.

DISCUSSION

The statistical tests of the respondents' data have revealed that recruitment & selection has a positive influence on the project success at POFs. The outcomes are matching with the study of Ansari et al. (2017). The impact of training & development on project success is also significant. The analysis results demonstrate that training and development processes and procedures in POFs are effective that aid the human resource towards enhancing their skills and help them to achieve the desired results in project success. Earlier research by Imran et al. (2016) also demonstrated that training & development programs are the most effective way to succeed in a project. In case of third hypothesis, the performance appraisal has a noteworthy influence on project success. Therefore, the results are in accordance with the study by Imran et al. (2016). The fourth hypothesis of the study is regarding impact of compensation practices on project success. It is evident from the results that effect of compensation practices on project success is not significant. Hence, top management

of POFs should ensure that compensation practices are perceived by the employees as competitive and matching with prevailing inflation in the country.

CONCLUSION AND RECOMMENDATIONS

The study aimed to inspect the association between practices to manage HR comprising of recruitment & selection, training & development, compensation, and performance appraisal on project success. The test results clarify that three factors including recruitment& selection, training & development, and performance appraisal have a positive and substantial influence on a project's success. It is also evident from the research of Belout and Gauvreau (2004) that the above-mentioned practices of HRM play a decisive role in the project's success. However, employees are not satisfied with existing compensation practices. POFs management needs to have more focus on HRM practices to improve organizational performance and hence better project success. This research concludes that various practices to manage human resources may influence the success rate of the projects at POFs.

In order to improve employee contribution and productivity, it is recommended that top management of POFs should take measures to enhance the project success. Special emphasis is to be laid on existing compensation practices which should be better than other industries because life at POFs is much risky and more demanding. Moreover, POFs top management should remain committed to the implementation of the latest trends in HRM practices to accomplish the set goals.

SUGGESTIONS FOR FUTURE RESEARCH

In the current study, only four practices of HR were considered to see its effect on project success. Future scholar may consider other aspects of HRM practices as well, to further improve project success. Moreover, future researchers should conduct a similar study in other sectors as well. Besides, a comparative study of POFs and other manufacturing organizations may also be conducted by future researchers.

REFERENCES

- Abdullah, A. A., & Wan, H. L. (2013). Relationships of non-monetary incentives, job satisfaction and employee job performance. *International Review of Management and Business Research*, 2(4), 7.
- Abdul Quddus. (2015). The impact of talent management on employee engagement: Retention and value addition in achieving organizational performance. *International Journal of Core Engineering & Management (IJCEM)*, 1 (12), 142.
- Abuazoom, A. M.I., Hanifi, H. B., & Ahmed, Z. B. (2017). Influence of HRM Practices on Project Performance: Conceptual Framework. *International Journal of Academic Research in Business and Social Sciences*, 7 (3), 44-57.
- Adu-Darkoh. (2014). Employee recruitment and selection practices in the construction industry in Ashanti region. (*Thesis Human Resource Management (Hons) submitted at KNUST*). Retrieved from http://ir.knust.edu.gh/bitstream/123456789/7651/1/Final%20Thesis%202014_Mavis%20
- Aggarwal, A., & Thakur, G. S. M. (2013). Techniques of *performance appraisal-A review*. *International Journal of Engineering and Advanced Technology*, 2(3), 617–621.
- Ahammad, T. (2017). Personnel management to human resource management (HRM): How HRM functions? *Journal of Modern Accounting and Auditing*, 13(9), 113-132.
- Ahmad, R., & Bujang, S. (2013). Issues and *Challenges in the practice of performance appraisal activities in the 21st century*. *International Journal of Education and Research*, 1(4), 1–8.
- Ahmed., I. et al. (2010). How organizations evaluate their trainings? An evidence from Pakistani organizations. *Interdisciplinary Journal of Contemporary Research in Business*, 2 (5), 73-97.
- Ahmed, I., & Kolachi, N. A. (2013). Employee payroll and training budget: case study of a non-teaching healthcare organization. *Journal of Business & Economics Research (JBER)*.11(5), 229.
- Alipour, M., & Salehi, M. (2009). A Study of on the job training effectiveness: Empirical evidence of Iran. *International Journal of Business Management*, 4 (11).
- Alnaqbi, W. (2011). The relationship between human resource practices and employee retention in public organizations: An exploratory study conducted in

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the United Arab Emirates. Edith Cowan University. Retrieved from <https://ro.ecu.edu.au/cgi/viewcontent.cgi?article=1424&context=theses>

Ansari, N. A., Haq, M. N., & Raza, S. (2017). Investment on HRM and Its Impact on Project Success. *Journal of Applied Environmental and Biological Sciences*, 8(3)13-20.

Babaita, I. S. (2010). Productivity as a driving force for investment in training and management development in the banking industry. *European Journal of Social Sciences*, 13.

Baccarini, D. (2011). Project objectives: A confused concept. *Conference Paper, 36th Australasian University Building Educators Association (AUBEA) Conference*.

Bogatova, M. (2017). Improving recruitment, selection and retention of employees' case. (*Bachelor's Thesis Business Management*). Retrieved from <https://pdfs.semanticscholar.org/df15/814968c24cc18983dd2e9185452107c-c5bd9.pdf>

Bajpai, V. (2009). How to retain key employees. Strategy/Retention,Dare.Co.In. Retrieved from http://www.executiveaccess.co.in/wp-content/uploads/2014/06/news/2009/2009_how_to_retain.pdf

Bekele, A. Z., Shigutu, A. D., & Tensay, A. T. (2014). The Effect of Employees' Perception of Performance Appraisal on Their Work Outcomes. *International Journal of Management and Commerce Innovations*, 2(1), 136–173.

Belout, A., & Gauvreau, C. (2004). Factors influencing project success: the impact of human resource management. *International journal of project management*, 22(1), 1-11.

Bird, D., & Frug, A. (2019). Dynamic Non-monetary Incentives. *American Economic Journal: Microeconomics*, 11(4), 111-50.

Boxall, P., & Macky, K. (2009). *Research and theory on high-performance work systems: progressing the high-involvement stream*. *Human Resource Management Journal*, 19(1), 3–23.

Breaugh, J. (2016). Talent acquisition: A guide to understanding and managing the recruitment process, *SHRM Foundation's Effective Practice Guidelines Series*.

Bryman, A. (2012). *Social research methods* (4th ed). Oxford; New York: Oxford University Press.

Burma, Z. A. (2014). Human resource management and its importance for today's or-

- ganizations. *International Journal of Education and Social Science*, 1(2), 10.
- Bustamam, F. L., Teng, S. S., & Abdullah, F. Z. (2014). Reward management and job satisfaction among front-line employees in hotel industry in Malaysia. *Procedia - Social and Behavioral Sciences*, 144, 392–402.
- Caldwell, R. (2008). HR business partner competency models: Re-contextualizing effectiveness. *Human Resource Management Journal*, 18(3), 275–294.
- Çalışkan, E. N. (2010). The impact of strategic human resource management on organizational performance. *Journal of Naval Science and Engineering*, 6(2), 100–116.
- Caruth, G. D. (2013). Demystifying mixed methods research design: A review of the literature: *Mevlana International Journal of Education (MIJE)*, 3(2), 112-122.
- Chungyalpa, W. & Karishma, T, (2016). Best practices and emerging trends in recruitment and selection. *Journal of Entrepreneurship & Organization Management*, 5 (2), 100-173.
- Chiang, F. F. T., & Birtch, T. A. (2012). The performance implications of financial and non-financial rewards: An Asian Nordic comparison: The Performance Implications of Rewards. *Journal of Management Studies*, 49(3), 538–570.
- Chughtai, M. W., & Nadeem, Z. I. (2015). Exploring the effects of training and development practices on organization performance: A case study of Pakistan Telecommunication Authority: *Asian Journal of Social Sciences and Management Studies*, 3 (1), 47-55.
- Clarke, P. (2011). Recruitment and selection practices in a selected organization. *Journal of Management Practice*. 5 (1), 166-177.
- Collins, A. & Baccarini, D. (2004). Project success – A survey. Adam Collins Broad Construction Services. Australia. Retrieved from https://espace.curtin.edu.au/bitstream/handle/20.500.11937/28361/20848_downloaded_stream_304.pdf?sequence=2
- Cosack, S., Guthridge, M., & Lawson, E. (2010). Retaining key employees in times of change. *McKinsey Quarterly*, August 2010. Retrieved from: <http://www.lovehr.ca/wp/wp-content/uploads/2018/05/Retaining-Employees-Through-Changed>.
- Daoanis, L. E. (2012). Performance appraisal system: It's implication to employee performance. *International Journal of Economics and Management Sciences*, 2(03), 55–62.

Mirza, M. S., Khan, R. A., and Bibi, M.

Dessler, G. (2013). *Human resource management* (13th ed). Boston: Prentice Hall.

Dobre, O.-I. (2013). Employee motivation and organizational performance. *Review of Applied Socio- Economic Research*, 5(1), 53–60.

Downes, P. E., & Choi, D. (2014). Employee reactions to pay dispersion: A typology of existing research. *Human Resource Management Review*, 24(1), 53–66.

Etikan, I. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.

Fatema, N. (2018). Stimulation of efficient employee performance through human resource management practices: A study on the healthcare sector of Bangladesh. *International Journal of Business and Social Research*, 8(1), 1–18.

Gupta, N., & Shaw, J. D. (2014). Employee compensation: The neglected area of HRM research. *Human Resource Management Review*, 24(1), 1–4.

Imran, A., Luqman, M., & Zaki, A. (2016). Impact of Human Capital Practices on Project Success. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 5 (6).

Inuwa, M. (2016). Job satisfaction and employee performance: An empirical approach. *The Millennium University Journal*, 1(1), 90–103.

Kampkötter, P. (2017). Performance appraisals and job satisfaction. *The International Journal of Human Resource Management*, 28(5), 750-774.

Kilmartin, L. (2015). *5 Steps to developing an effective training plan: Adobe Systems Incorporated. USA*. Retrieved from https://helpx.adobe.com/content/dam/help/en/document-cloud/Adobe_DC_eSign_Best_Practices_Training_Plan.PDF

Kirkpatrick, D. L. (2004). *Evaluating training programs: The four levels, The AST-D Handbook of training design and delivery*, New Delhi: Tata McGraw-Hill.

Kerdpitak, C., & Jernsittiparsert, K. (2019). Human Resources Capabilities and Financial Performance: A Case of Thai Pharmaceutical Firms. *Systematic Reviews in Pharmacy*, 10(2), 198-207.

Kerdpitak, C., & Jernsittiparsert, 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.

Koshy, E. R., & Suguna, P. (2014). Performance appraisal in the contemporary world. *International Journal of Advance Research in Computer Science and Man-*

- Kumar, Rakesh, Anjum, B., & Sinha, D. A. (2011). Employee performance appraisal in hospital: Who, what, how and when? *International Journal of Commerce & Management Studies*, 2(5), 142–151.
- Lengnick-Hall, M. L., Lengnick-Hall, C. A., Andrade, L. S., & Drake, B. (2009). Strategic human resource management: The evolution of the field. *Human Resource Management Review*, 19(2), 64–85.
- Long, C., Kowang, T., Chin, T., & Hee, O. (2016). Improving organizational performance through training function: A Review. *International Business Management*, 10(4), 475–478.
- Mankikar, S. (2014). A critical study on recruitment and selection with reference to HR consulting firms. *Paripex - Indian Journal of Research*, 3(3), 108-111.
- Mehreza, A., & Alamirib, F. (2019). An assessment of performance appraisal satisfaction levels among physicians: *Investigation from the healthcare sector in Qatar*: www.GrowingScience.com/msl.
- Miller, J. A., & Diana, M. O. (2002). Training needs assessment. *SPHR July 2002: SHRM Training and Development Committee*. Retrieved from [http://www.scirp.org/\(S\(lz5mqp453edsnp55rrgjt55\)\)/reference/ReferencesPapers.aspx?ReferenceID=1362833](http://www.scirp.org/(S(lz5mqp453edsnp55rrgjt55))/reference/ReferencesPapers.aspx?ReferenceID=1362833)
- Mir, F. A., & Pinnington, A. H. (2014). Exploring the value of project management: linking project management performance and project success. *International Journal of Project Management*, 32(2), 202-217.
- Mohammad, A, H., Osman, D., & Edris, M. H. (2014). The effect of human resources management practices on employee performance. *International Journal of Scientific & Technology Research*, 3(9), 129–134.
- Muda, I., Rafiki, A., & Harahap, M. R. (2014). Factors influencing employees' performance: A study on the Islamic Banks in Indonesia. *International Journal of Business and Social Science*, 5(2), 73–80.
- Muhammad, I. G., & Abdullah, H. H. (2016). *Assessment of organizational performance: Linking the motivational antecedents of empowerment, compensation and organizational commitment*, 6(4), 974–983.
- Myrna, G. (2008). *Recruitment and selection: Hiring the right person-A two-part learning module*. Staffing Management Instructor's Manual, Society for Human Resource Management. Retrieved from <https://cdn.ymaws.com/ise>.

org.uk/resource/resmgr/files/knowledge_reports/Recruitment_and_Selection_IM.pdf

- Niazi, A. S. (2011). Training and development strategy and its role in organizational performance. *Journal of Public Administration and Governance*, 1 (2).
- Osibanjo, O. A., & Adeniji, A. A. (2012). *Human resource management: Theory & Practice* (1st Ed.) (Vol. 1). Pumark Nigeria Ltd. Retrieved from https://cdn.ymaws.com/ise.org.uk/resource/resmgr/files/knowledge_reports/Recruitment_and_Selection_IM.pdf
- Osibanjo, O. A., Adeniji, A. A., Olubusayo, H., & Heirsmac, P. T. (2014). *Compensation packages: a strategic tool for employees' performance and retention. Leonardo Journal of Sciences*, (25), 65–84.
- Owoyemi, D. O., & George, D. O. (2013). The use performance appraisal system in enhancing employees' performance in a public sector agency in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 3(10), 240–249.
- Premalatha, U. M. (2013). Impact of compensation system on employee performance – A study with special reference to service sector. *International Journal of Management, IT and Engineering*, 3(12), 38–47.
- Rafique, S. R., Ali, T., & Imran, A. S. (2017). Factors affecting to employee's performance. A study of Islamic Banks. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 7 (1).
- Raineri, A. (2017). Linking human resources practices with performance: The simultaneous mediation of collective affective commitment and human capital. *The International Journal of Human Resource Management*, 28(22), 3149–3178.
- Rubel, M.R.B., & Kee, D. M. H. (2015). Perceived fairness of performance appraisal, promotion opportunity and Nurses turnover intention: The role of organizational commitment. *Asian Social Science*, 11 (9).
- Salas, E., Tannenbaum, S.I., Kraiger, K., & Smith-Jentsch, K. A. (2012). The science of training and development in organizations: What matters in practice. *Psychological Science in the Public Interest*, 13(2), 74–101.
- Sarwar, H., Aftab, J., Sarwar, H., & Shahid, A. (2016). Role of HRM in Project Success of Project Oriented Organizations in Southern Punjab, Pakistan; *Entrepreneurship and Innovation Management Journal*, 4 (3), 110-121.

- Sekaran, U. (2003). *Research methods for business: A skill building approach* (4 edition). New York: Wiley.
- Shaharyar, M., Baloch, M. A., Tariq, M. A., Mushtaq, S., & Mushtaq, A. (2014). Impact of performance appraisal on employee performance. *Journal of Resources Development and Management*, 3, 22–24.
- Shahzadi, I., Javed, A., Pirzada, S. S., Nasreen, S., & Khanam, F. (2014). Impact of employee motivation on employee performance. *European Journal of Business and Management*, 6(23), 159–166.
- Shin, D., & Konrad, A.M. (2017). Causality between high-performance work systems and organizational performance. *Journal of Management*, 43(4), 973–997.
- Nasreem, S., Hassan, M., & Khan, T.A. (2016). Effectiveness of E-Recruitment in small and medium enterprises of it industry of Lahore (Pakistan). *Pakistan Economic and Social Review*. 54(1), 143-164.
- Singh, S. P., & Rana, S. (2013). The impact of performance appraisal on organizational commitment of bank employees: *International Journal of Science and Research (IJSR)*, 2319-7064 Index Copernicus, 6, 14.
- Siramiati, N. W., Surachman, Hadiwidjojo, D., & Rohman, F. (2016). Performance-based compensation effect on employee motivation, satisfaction of employees, and performance of employees: Conceptual Frameworks. *International Journal of Business, Economics and Law*, 11(2), 54-69.
- Sippy, N., & Varma, S. (2014). Performance appraisal systems in the hospital sector –A Research based on hospitals in Kerala. *International Journal of Business Management & Research*, 4(1), 97–106.
- Sopiah. (2016). The relationship between performance appraisal and job performance. *International Journal of Academic Research in Business and Social Sciences*, 6(6), 104–115.
- Tabouli, E. M. A., Habtoor, N. A., & Nashief S., M. (2016). The impact of human resources management on employee performance: Organizational commitment mediator variable. *Asian Social Science*, 12(9), 176.
- Ueno, A. (2014). Developing a conceptual model illustrating how HRM Practices Support Each other in Order to Improve Service Quality. *Procedia - Social and Behavioral Sciences*, 14(8), 24–31.
- Vaiman, V., & Vance, C. M. (2008). *Smart talent management: Building knowledge assets for competitive advantage*. Cheltenham, UK: Edward Elgar Pub.

Mirza, M. S., Khan, R. A., and Bibi, M.

Vinesh, (2014). Role of training & development in an organizational development. *International Journal of Management and International Business Studies*, 4(2), 213-220.

Wambua, M. M. (2013). Effects of Human Resource Factors on Project Performance in Nairobi County in Kenya: A Case of Selected Organizations in Westlands. Retrieved from <https://pdfs.semanticscholar.org/eed6/b9c9eed74536d454c-3c51cb43188da8922eb.pdf>

Watson, J. M. (2018). Job Embeddedness May Hold the Key to the Retention of Novice Talent in Schools. *Educational Leadership and Administration: Teaching and Program Development*, 29(1), 26-43.

Yang, L. R., Chen, J. H., Wu, K. S., Huang, D. M., & Cheng, C. H. (2015). A framework for evaluating relationship among HRM practices, project success and organizational benefit. *Quality & Quantity*, 49(3), 1039-1061.

ANNEX ‘A’

Questionnaire Survey

Title: “Impact of Human Resource Management Practices on Project Success in Ordnance Industry of Pakistan– An Empirical from POF Wah”

Respondent’s Profile:

Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female
Age (yrs)	<input type="checkbox"/> 16-21 <input type="checkbox"/> 22-30 <input type="checkbox"/> 31-40 <input type="checkbox"/> >41
Education (yrs)	<input type="checkbox"/> Under Graduate <input type="checkbox"/> Graduate <input type="checkbox"/> Master <input type="checkbox"/> Others
Job Experience (yrs)	<input type="checkbox"/> 1-5 <input type="checkbox"/> 5-10 <input type="checkbox"/> 10-15 <input type="checkbox"/> More
Scale	<input type="checkbox"/> 1-12 <input type="checkbox"/> 12-15 <input type="checkbox"/> 16 and above
Department/Section	<input type="checkbox"/> HR <input type="checkbox"/> Admin <input type="checkbox"/> Factory <input type="checkbox"/> Workshop
Date	

Instructions:

Kindly answer the below questions and Mark ☒ the right box.

a. Choices are defined as:

1. **SD** (Strongly Disagree); 2. **D** (Disagree) 3. **N** (Neutral); 4. **A** (Agree);
5. **SA** (Strongly Agree)

S. No	Question Statements	SD (1)	D (2)	N (3)	A (4)	SA (5)
Recruitment & Selection						
RS1	Vacancies are openly advertised for broader coverage.					
RS2	All candidates are given equal opportunity to apply.					
RS3	Selection criteria exist for each job.					

RS4	Internal recruitment through career development is undertaken effectively.					
RS5	Recruitment & selection process is perceived as fair and merit based.					
Training & Development						
TD6	Proper training need assessment (TNA) is undertaken before planning training programs.					
TD7	Training objectives are defined prior to each training program.					
TD8	Latest training methods are used to get better training results.					
TD9	Appropriate budget is allocated for annual training programs.					
TD10	Training helps in improving employee performance.					
Performance Appraisal						
PA11	Goals are decided with participation of employees in the beginning of appraisal cycle.					
PA12	Periodic review meetings are held to examine the ongoing work progress.					
PA13	Timely feedback is provided to employees about their strengths and weaknesses.					
PA14	Employees are satisfied with overall performance appraisal process.					
Compensation Practices						
CP15	Salary & benefits are decided on the basis of industry trends.					
CP16	Rewards are strictly associated with the employee performance.					

CP17	Salary raises and incentives are provided on merit.					
CP18	Employees are generally satisfied with existing compensation package.					
Project Success						
PS19	Projects' success leads to customer satisfaction.					
PS20	Projects contribute in improvement of organization performance.					
PS21	Projects enhance technological capability and project team's competence.					
PS22	Projects improve processes and minimize deviations.					
PS23	Projects increase overall organization's profitability.					

Thank you for your response