

Relationship Between Human Resource Management and Organizational Performance: Employee Skills as a Mediator

Mohamed Elfadeel Ali Akeel, Roshartini Omar, Md Asrul Nasid Masrom

UTHM, Batu Pahat, Johor, Malaysia

Correspondence Author: Mohamed Elfadeel Ali Akeel, UTHM, Batu Pahat, Johor, Malaysia.

E-mail:- moha_fadel85@hotmail.com

Received date: 28 January 2019, Accepted date: 13 March 2019, Online date: 28 April 2019

Copyright: © 2019 Mohamed Elfadeel Ali Akeel *et al*, This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

Employee skills is very important elements of HRM policies that influence organizational performance when the employees are skilled, they are willing to dedicate more time and show commitment at a certain level for achieving organizational objectives. More skilful workers will also perform better so that the organization will also perform better. Besides, good attitude is necessary that should be processed by the employees to achieve organization's goals and targets Therefore, the purpose of this study is to explore employee skills as a mediator between HRM and organizational performance. A sample of this study was 219 respondents from employee construction in Libya. The data was analyzed using structural equation modelling (SEM) approach. This study showed that employee skills is a full mediator between relationship HRM and organizational performance. Therefore, HRM practices influence employee skills and its give impact to organizational performance for more effective and efficient in achieving organization goal.

Key words: employee skills, human resource management, organizational performance, skill, practice

INTRODUCTION

The practice of human resource management (HRM) is vital to assess to determine the companies succeed or fail or varying the performance levels. It seems that organisations that use proper HRM techniques do have higher levels of performance (Yeung & Berman, 2012). As such, HR process provides the employees with a system that guides them in making the correct decision not only in regards to what they have to do rather also provide them with the appropriate way for doing it (Raj & Kothai, 2014).

In literature review, there is a lack of studies to look into the employee skills as a mediator between HRM and organizational performance, particularly in Libya. Therefore, the main objective of this study is to examine employee skills as a mediator between HRM and organizational performance from the employee's construction in Libya.

Yeung and Berman (2012) suggested that employee skills, is very important elements of HRM policies that influence organisational performance (Youndt *et al.*, 1996; Purcell & Kinnie, 2007). Libya is presently undergoing rapid constructions for its infrastructure development (Omran *et al.*, 2012; Tumi *et al.*, 2009). As the construction industry is based on technology (Keating & Olivares, 2007; Zhu *et al.*, 2008), hence, developing employee skills is important that will enhance organisational performance (Abdullah *et al.*, 2009; Omran *et al.*, 2012). This is because, when the employees are skilled, they are willing to dedicate more time and show commitment at a certain level for achieving organisational objectives (Dearden *et al.*, 2006). More skilful workers will also perform better so that the organisation will also perform better (Ballot *et al.*, 2006; Conti, 2005). Besides, good attitude is necessary that should be processed by the employees to achieve organisation's goals and targets (Harter *et al.*, 2002).

LITERATURE REVIEW

Human Resource Management (HRM)

Human resource management (HRM) has evolved to be the most strategic and significant part of organisations. It primarily consists of managerial operations such as payroll, hiring and firing. Hence, HRM basically manages employees' legal compliance and satisfaction (Noe *et al.*, 2010). As defined by Boxall and Purcell (2008), HRM refers to "all those activities that are related with people management in firms". According to Schulte *et al.* (2009), "HRM involves different types of management activities,

instead of a single management activity”. Moreover, as defined by Noe *et al.* (2010), HRM is “a policy, philosophy, practice or system that has the potential to impact the attitudes, performance, and behaviour of employees.”

Most recently, HR department involves in the key decision making process for any organizations towards value maximization through cost reduction (Hassan, 2007). Accordingly, it has also been pointed by Boxall and Purcell (2008) that HR practitioners are extensively demonstrating the importance and value of HR’s role through revealing how it impacts a particular firms’ overall performance (Boxall & Purcell, 2008). Basing on the study conducted by Huselid (2011), HRM significantly impact on the organisation’s performance. Furthermore, past empirical evidences also support the influence of HRM on performance (Combs *et al.*, 2006; Boxall, Purcell & Wright, 2007; Gerhart, 2007; Boxall & Macky, 2009; Paauwe, 2009; Wood, 2009). According to Ramlall (2003) stated that several large-scale proven that HRM is a critical driver in an organization’s financial performance, it is imperative for HR and other leaders to understand the critical nature and utmost importance of understanding the effectiveness of all HR activities in creating value for the organization”.

Study conducted by Grifa (2006) pointed out that Libyan construction industry operates under traditional procurement system where verbal communications are widely used instead of written ones. Thus, it faces many difficulties for the foreign as well as the local companies to operate in Libya under this circumstance (Shibani, Ganjian & Soetanto, 2010). These regulations and the current working environments have also created obstacles for the growth of this industry. However, due to the increased pressures from globalization; Libyan organisations also started realizing the importance of HRM. However, Hokoma *et al.* (2010) and Ngab (2007) pointed out that the current practice of HRM in Libya is not up to the standard of developed country. As Libya is currently undergoing reformation process, they need proper implementation of HRM practices in order to cope with the modern world. Hokoma (2010) also pointed out that for proper implementation of HRM for Libyan construction industry sector needs to confirm the proper practices and support from the top management towards implementation. Therefore, in order to preserve harmony, it has become very important for Libyan construction firms to craft refined HRM strategies and also policies so that they can successfully manage the workforce of their organisations (Abu Bakar & Commer, 2011).

Organizational Performance

Organisational performance basically can be defined as how a company or an organisation is performing with respect to the current business market. An organisation with efficient performance can be considered as successful for profit-making. An important part of the human management process of any organisation includes selection of suitable human resources and keeping the employees motivated. Human resource management is the base of an elevated performance for any business. In the construction industry, there is adequate scope for improving organisational performance through efficient people management. The development of an efficient system for the managers and employees is a major challenge with any organisational performance management system (Mohamad & Lo, 2009).

Focusing on performance and the entire performance management process, it is possible for the construction industry to claim that organisational performance involves perfection, harmonisation, growth, technological improvement, competitive advantage for articulating the perceived value for the customer, and economic value creation (Leopold & Harris, 2009). However, from an industry standpoint, the scope of performance is apparently extremely broad. This is why an enterprise should implement a performance management system (Cokins, 2009). The construction industry considers performance as an effective management system that involves a concrete comprehension of the recital sphere of influence in terms of other companies, which entails gaining an understanding of the responsibilities and the job descriptions within the organisation (Robert, 2003).

The abilities of an organisation to create a centre of consideration, promote growth and progress, attract clients, and develop the organisation are all important. It is therefore very important to understand that in order for any organisation to succeed, it should also focus on human resource management (Leopold & Harris, 2009; Longenecker & Fink, 2011; 2012).

Employee Skills as a Mediator

Human resource is important in developing a high-performance organisation (Keating & Olivares, 2007). As a result, human resource management has become the core of numerous industries. Furthermore, the importance of HRM should be recognised since it plays an important role in improving the organisational performance (Keating & Olivares, 2007; Zheng & Lamond, 2009). The company needs to ensure that human resource tools are being used effectively to achieve the goals. The performance evaluator needs to observe the performance of the employee and determine vital training and development needs at the same time (Zhu *et al.*, 2008; Leopold & Harris, 2009). Nevertheless, it is also believed that workers who are more skilful will perform better, which also improves the performance of the organisation (Ballot *et al.*, 2006; Conti, 2005).

Alternatively, developing the employees’ skills is an important element that contributes to and enhances organisational performance. Skilled employees are more willing to show commitment and dedicate time at a certain level to attain their organisational objectives (Dearden *et al.*, 2006). Within the construction industry, the skills that are needed by employees continuously change as a result of the difference of expectations between the younger and older generation. Since the construction industry is based on technology because younger generations make good use of technology, it can be considered as another effective tool that human resource can use to recruit new generations and make it part of this industry (Keating & Olivares, 2007; Zhu *et al.*, 2008).

Furthermore, majority of construction organisations need skilled employees since they have to work in an environment that is highly skilled. One should note that employee performance and skill are interlinked variables and that they are considered as the major factors in helping the construction industry progress. Many literature works that focused on employee skill development within the construction industry have stated that employee mentorship is important (Noypayak & Speece, 1998; Leopold & Harris, 2009; Longenecker & Fink, 2012).

Previous studies that were performed on HRM have discovered that proper training improves productivity. These outcomes are then shared by both the employers and employees (Ballot et al., 2006; Conti, 2005; Dearden et al., 2006). It has also been confirmed by other studies that one can improve organisational performance by employee training (Barrett & O'Connell, 2001; Lynch & Black, 1995). This is due to the fact that effective training helps employees obtain more knowledge and enhance the required skills (Nankervis, Compton & McCarthy, 2009). Furthermore, an employee with better skills contributes to the performance of the firm (Drummond, 2000;). As a result of technological advancement and rapid globalisation occurring in the present business environment, new strategies for the organisations need to be developed to help them establish their future directions (Hassan, 2007; Hitt, Hoskisson & Kim, 1997; Lin & Chen, 2007; Pratali, 2003; Nohria & Gulati, 1996). HRM therefore plays an important role in organisational performance as it is responsible for making sure that the employees are updated in terms of their knowledge and skills (Dave & Wayne, 2005; Leifer, O'Connor &, 2001; Li, & Liu, 2006; McLoughlin & Harris, 1997). From the perspective of the Libyan industry, identifying the potentials of employees for success within managerial positions involves using the human resource management department. This is referred to as the advanced management potential assessment program. Consequently, it is not easy to promote and lay off employees within an organisation. A company that wants to lay off a part of its workforce as a resort of structural and economic changes would face difficulties during the filtering process. In such a situation, the human resource management department is responsible for the simulation of their job requirements (Leopold & Harris, 2009). Furthermore, in order to encourage employees to enhance their knowledge and skills, construction industries have to think about how mentoring is associated to their job satisfaction. They should also properly implement human resource as well. The performance of the industry will steadily improve if employees are motivated.

Conceptual Framework and Hypotheses Development

The basic research model in this study is exhibited in Figure 1.

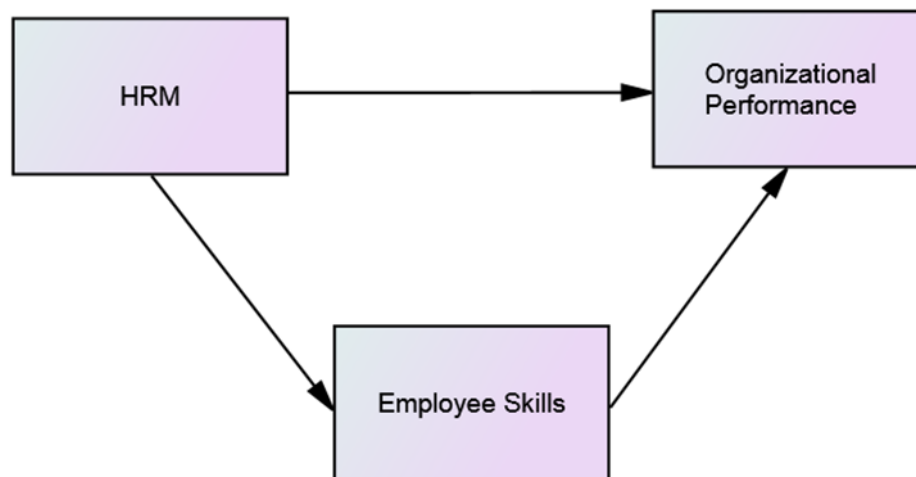


Figure 1. Conceptual Framework

To meet the research objectives and based on the conceptual framework presented above, four hypotheses are constructed as follows:

H1: Human Resource Management (HRM) is positively related to Employee Skills

H2: Employee Skills is positively related to Organizational Performance

H3: Human Resource Management (HRM) is positively related to Organizational Performance

H4: There is a mediating relationship through Employee Skills between Human Resource Management (HRM) and Organizational Performance

RESEARCH METHODOLOGY

The research design of this study focus on a quantitative approach to achieve the research objectives. The use of quantitative is appropriate in this research because it enables the researcher to get snapshot views and attitudes of the respondents with respect to the social phenomenon under study (Sekaran & Bougie, 2010). All scaled items are in interval scales. This study will use a five point Likert scale. Pallant (2007) mentioned that Likert scale is that it sums up the responses to represent a particular statement which then can be manipulated to obtain certain desirable result with regards to objective of the study.

In this proposed research study, data was collected through a self-administered questionnaire from the various construction companies operating in Libya. The respondents for this study are the employees working at various construction companies in Libya. A random sampling method is used to select the samples for this study. The respondents are chosen from the different companies randomly. Prior to that, the respondents are asked their willingness to participate in this survey and only those who voluntarily agreed is given the questionnaire.

FINDINGS AND DISCUSSION

Demographic Profiles

Table 4.1: Demographic and Profile Details of Samples

Characteristic	Frequency	Percentage	Cumulative Percentage
Types of Construction (n=219)			
Commercial	134	61.2	61.2
Housing	85	38.8	100
Classification of Organization (Total Capital) (n=219)	115	52.5	52.5
A (More than 10 million Dinar)	88	40.2	92.7
B (Between 5 and 10 million Dinar)	12	5.5	98.2
C (Between 1 and 5 million Dinar)	4	1.8	100.0
D (Less than 1 million Dinar)			
Nationality (n=219)			
Local	119	54.3	54.3
Foreigner	100	45.7	100.0
Level of Education (n=219)			
Diploma	14	6.4	6.4
Bachelor Degree	141	64.4	70.8
Master Degree	58	26.5	97.3
PhD	6	2.7	100
Job Position (n=219)			
Architect	29	13.2	13.2
Civil Engineer	124	56.6	69.9
Mechanical Engineer	44	20.1	90.0
Quality Controller	13	5.9	95.9
Site Manager	9	4.1	100.0
Monthly Income (in Dinar) (n=219)			
3,000 and below	63	28.8	28.8
3,001 – 5,000	64	29.2	58.0
5,001 – 10,000	61	27.9	85.8
10,001 and above	31	14.2	100.0
Years' Experience			
5 years and below	21	9.6	9.6
6 -10 years	100	45.7	55.3
11- 15 years	23	10.5	65.8
16 years and above	75	34.2	100.0
Organization Type			
Private Organization	206	94.1	94.1
Government Employee	13	5.9	100.0

Assessing Mediating Relationship

The researcher has tested the direct effect of Human Resource Management (HRMT) and Organizational Performance (OrgP) and employee skill as a mediating as shown in figure 2.

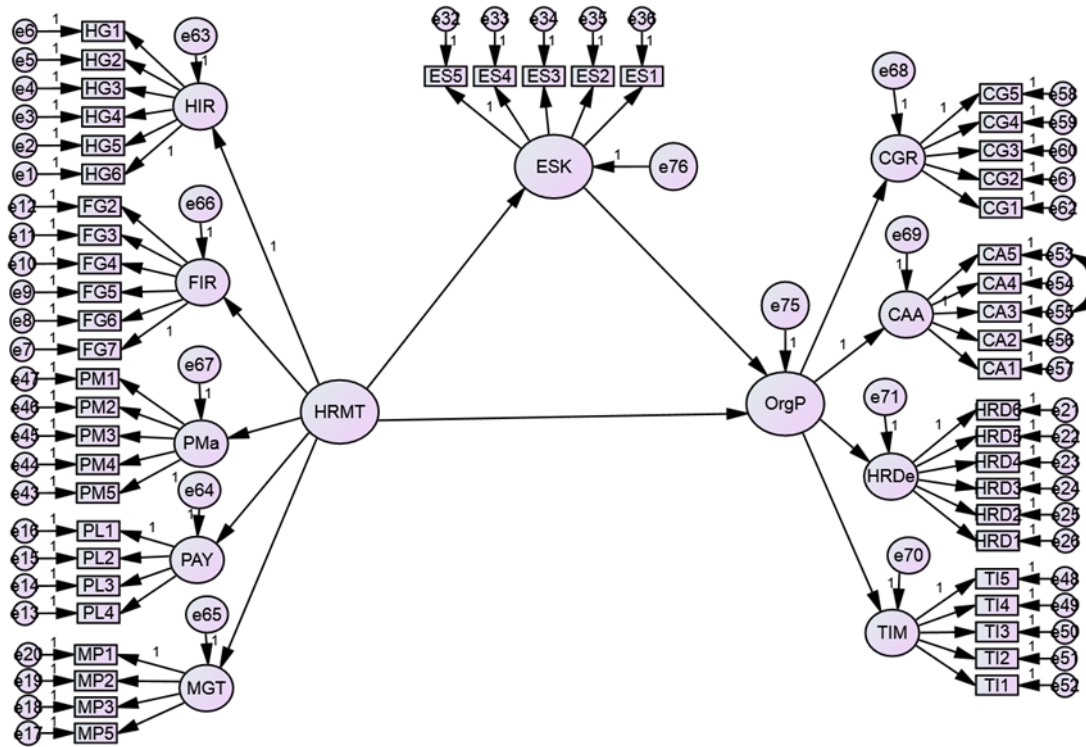


Figure 2: The output showing Regression Weights between construct

The first path coefficient HRMT → Employee Skills (ESK) as shown in Table 1.3 proved acceptable result that can be judged via Critical Ratio (C.R.) and significance level (P). As C.R. is greater than 1.96 and P is significant, thus, it can be shown that the regression weight for HRM in the prediction of employee skills which is significantly different from zero at the 0.05 level (two-tailed). Besides, the second path coefficient employee skills → organizational performance also confirms an adequate result that can be determined using Critical Ratio (C.R.) and significance level (P). Since the C.R. is greater than 1.96 and P are significant, as a result, it can be indicated that the regression weight for employee skills in the prediction of organizational performance is considerably different from zero at the 0.05 level (two-tailed). Hence, there is a true mediating relationship exists between HRM and organizational performance when employee skills is treated as a mediator.

Table 1.3: The Path Regression Coefficient and its significance

Variable		Variable	Estimate	S.E.	C.R.	P	Result
ESK	<---	HRMT	0.355	0.137	2.588	0.010	Significant
OrgP	<---	ESK	0.200	0.083	2.409	0.016	Significant
OrgP	<---	HRMT	0.002	0.041	0.043	0.966	Not Significant

Furthermore, the third path coefficient (HRMT → Org P (organizational performance)) indicated acceptable result that can be proved using Critical Ration (C.R.) and significance level (P) values. In this circumstance, the C.R. value is lower than 1.96 and P is not significant. Therefore, there is direct relationship between HRM and organizational performance, which is a sign of full mediating relationship while there is a factual intervening relationship exists between HRM and organizational performance when employee skills plays a mediating role.

Hypotheses Testing

However, total four hypotheses, including mediating relationship, have been answered by goodness-of-fit indices, showing the HRM influence employee skills and employee skills influence organizational performance. Moreover, Table 1.4 summarizes the findings on the hypotheses in this research framework.

Table 1.4: Summary of Hypotheses Testing

H (x)	Hypotheses	Finding
H1	Human Resource Management (HRM) is positively related to Employee Skills	Supported
H2	Employee Skills is positively related to Organizational Performance	Supported
H3	Human Resource Management (HRM) is positively related to Organizational Performance	Not Supported
H4	There is a mediating relationship through Employee Skills between Human Resource Management (HRM) and Organizational Performance	Supported

The findings suggested that employee skills are a significant and full mediator to the relationships between HRM and organizational performance. Therefore, employee skills are critical in boosting the effect of HRM with organizational performance.

CONCLUSION

This study is an attempt to assess the employee skills as mediator between HRM and organizational performance in employee Construction Company in Libya. Prior to conducting Structural Equation Modelling (SEM), the reliability analysis is checked via Cronbach's alpha coefficient of the three extracted factors for the purpose of ensuring the internal consistency. Next, the mediating relationship is performed using SEM to indicate the appropriateness of the measurement instruments. The results indicated that HRM is positively related to the employee skills directly related to the organizational performance. Apart from this, the employee skills is found assertively allied to the organizational performance while employee skills plays the mediating roles in the HRM towards organizational performance in Libya. The current study adds value to the current level of knowledge in the existing literature.

REFERENCES

- Abdullah, Z., Ahsan, N., & Alam, S. S. (2009). The Effect of Human Resource Management Practices on Business Performance among Private Companies in Malaysia. *International Journal of Business and Management*, 4(6), 65-72.
- Abu Bakar, A. H., & Commer, P. J. (2011). Implementation of Strategic management Practices in the Malaysian Construction Industry. *Organisational Dynamics*, 5(1), 140-154.
- Ballot, G., Fakhfakh, F., & Taymaz, E. (2006). Who benefits from training and R & D, the firm or the workers? *British Journal of Industrial Relations*, 44, 473-495.
- Barrett, A., & O'Connell, P. J. (2001). Does training generally work? The returns to in-company training. *Industrial and Labor Relations Review*, 54, 647-662.
- 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.
- Boxall, P. & Purcell, P. (2008). *Strategy and human resource management*. (2nd ed.). Basingstoke: Palgrave Macmillan.
- Boxall, P., Purcell, J. & Wright, P. (2007). Human resource management: Scope, analysis, and significance. In P. Boxall, J. Purcell & P. Wright (Eds.). *The oxford handbook of human resource management* (pp. 1-16). New York: Oxford University Press.
- Cokins, G. (2009). *Performance Management: Integrating Strategy Execution, Methodologies, Risk, and Analytics*. New York: John Wiley and Sons, Inc.
- Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organisational performance. *Personnel Psychology*, 59(3), 501-528.
- Conti, G. (2005). Training, Productivity and Wages in Italy. *Labour Economics*, 12, 557-576.
- Dave, U., & Wayne, B. (2005). *HRM value of proposition*. Boston: Harvard Business School.
- Dearden, L., Reed, H., & Van Reenen, J. (2006). The Impact of Training on Productivity and Wages: Evidence from British Panel Data. *Oxford Bulletin of Economics and Statistics* 68(4), 397-421.
- Drummond, H. (2000). *Effective Management: A hand book for manager*. Kogan Page.
- Gerhart, B. (2007). Modeling HRM and performance linkages. In P. Boxall, J. Purcell & P. Wright (Eds.). *The Oxford handbook of human resource management* (pp. 552-580). Oxford: Oxford University Press.
- Grifa, M. A. (2006). *The construction industry in Libya, with particular reference to operations in Tripoli*. PhD Dissertation. Retrieved from <http://hdl.handle.net/10443/238>.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87, 268-279.
- Hassan, A. (2007). Human resource development and Organisational values. *Journal of European Industrial Training*, 31(6), 435-448.
- Hitt, M. A., Hoskisson, R. E., & Kim, H. (1997). International diversification: Effects on innovation and Firm Performance in Product-Diversified Firms. *The Academy of Management Journal*, 40(4), 767-798.
- Hokoma, R., Khan, M., & Hussain, K. (2010). The Present Status of Quality and Manufacturing Management Techniques and Philosophies within the Libyan Iron & Steel Industry. *TQM Journal*, 2(3), 269-278.
- Huselid, M. A. (2011). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), 635-672.
- Keating, M. A., & Olivares, M. (2007). Human resource management: practices in Irish high-tech start-up firms. *Journal of Management*, 28(2), 171-192.
- Leifer, R., O'Connor, G. C., & Rice, M. (2001). Implementing radical innovation in mature firms: The role of hubs. *Academy of Management Executive*, 15(3), 102-113.
- Leopold, J., & Harris, L. (2009). *Strategic Managing of Human Resources* (2nd ed.). Harlow: Pearson Education.
- Li, Y., Zhao, Y., & Liu, Y. (2006). The relationship between HRM, technology innovation and performance in China. *International Journal of Manpower*, 27(7), 679-697.
- Lin, C. Y. Y., & Chen, M. Y. C. (2007). Does innovation lead to performance? An empirical study of SMEs in Taiwan. *Management Research News*, 30(2), 115-132.

- Longenecker, C. O., & Fink, L. S. (2011). The new HRM reality: HR leadership in trying economic times. *HR Advisor Journal*, 3(4), 19-28.
- Longenecker, C. O., & Fink, L. S. (2012). Breaching the barriers to creating human-resource management value: an executives' guide. *Effective Executive Journal*, 15(2), 39-52.
- Lynch, L. M., & Black, S. E. (1995). *Beyond the incidence of training: Evidence from a national employers' survey*. NBER working paper 5231.
- McLoughlin, I., & Harris, M. (1997). *Innovation, Organisational change and technology*. London: International Thomson Business Press.
- Mohamad, A. A., & Lo, M. C. (2009). Human resource Practice and Organisational Performance. Incentives as Moderator. *Journal of Academic Research in Economics*, 1(2), 229-244.
- Nankervis, A. R., Compton, R. L., & McCarthy, T. E. (2009). *Strategic Human Resource Management* (3rd Ed.). Melbourne: Nelson ITP.
- Ngab, A. S. (2007). *Libya: The Construction Industry – An Overview*. Karachi: Ned University of Engineering and Technology, Karachi, Pakistan.
- Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2010). *Human resource Management: Gaining a competitive Advantage* (7th ed.). New York: McGraw-Hill/Irwin.
- Nohria, N., & Gulati, R. (1996). Is slack good or bad for innovation? *Academy of Management Journal*, 39, 245-264.
- Noypayak, W., & Speece, M. (1998). Tactics to influence subordinates among Thai managers. *Journal of Managerial Psychology*, 13, 343-358.
- Omran, A., Bazeabaz, A., Gebiril, A. O., & Wah, W. S. (2012). Developing Competency Model for the Project Manager in the Libyan Construction Industry. *Journal of Economic Behaviour*, 2, 27-36.
- Paauwe, J. (2009). HRM and performance: Achievements, methodological issues and prospects. *Journal of Management Studies*, 46(1), 129-155.
- Pallant, J. (2007). *SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS for Windows* (3rd ed.). Berkshire: Open University Press, McGraw-Hill.
- Pratali, P. (2003). Strategic management of technological innovations in the small to medium enterprise. *European Journal of Innovation Management*, 6(1), 18-31.
- Purcell, J. & Kinnie, N. (2007). HRM and business performance. In P. Boxall, J. Purcell & P. Wright (Eds.), *The oxford handbook of human resource management* (pp. 533-551). New York: Oxford University Press.
- Raj, B. V. A., & Kothai, P. S. (2014). Study on the Impact of Human Resource Management Practices in Construction Industry. *The International Journal of Management*, 3(1), 1-22.
- Ramlall, S. J. (2003). Measuring Human Resource Management's Effectiveness in Improving Performance. *Human Resource Planning*, 26(1):51-64.
- Robert, C. L (2003). *Performance Management: Concepts, Skills, and Exercises*. London: M.E. Sharpe, Inc.
- Schulte, M., Ostroff, C., Shmulyian, S. & Kinicki, A. (2009). Organisational climate configurations: Relationships to collective attitudes, customer satisfaction, and performance. *Journal of Applied Psychology*, 94(3), 618-634.
- Sekaran, U., & Bougie, R. (2010). *Research methods for business: a skill-building approach* (5th ed). Haddington: John Wiley & Sons.
- Shibani, A., Ganjian, E., & Soetanto, R. (2010). Implementation of total quality management in the Libyan construction industry. *International Journal of Project Organisation and Management*, 2(4), 382-403.
- Tumi, S. A. H., Omran, A., & Pakir, A. H. K. (2009). *Causes of Delay in Construction Industry in Libyan*. Paper Presented at the International Conference on Economics and Administration, Faculty of Administration and Business, University of Bucharest, Romania ICEA – FAA Bucharest, 14-15, November, 2009, pp. 265-272.
- Wood, S. (2009). HRM and Organisational performance. In D.G. Collings & G. Wood (Eds.), *Human Resource Management: A critical approach* (pp. 55-74). London: Routledge Taylor & Francis Group.
- Yeung, A.K., & Berman, B. (2012). Adding value through human resources: reorienting human resource measurement to drive business performance. *Human Resource Management*, 26(3), 321-335.
- 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), 33-42.
- Zainudin, A. 2015. *Structural Equation Modeling Using Amos Graphic*. Shah Alam: Universiti Teknologi Mara Publication Center (UPENA).
- Zheng, C., & Lamond, D. (2009). A Chinese style of human resource management: exploring ancient texts. *Chinese Management Studies*, 3(4), 258-271.
- Zhu, C. J., Thomson, S. B., & De Cieri, H. (2008). A retrospective and prospective analysis of HRM research in Chinese firms: implications and directions for future study. *Human Resource Management*, 47, 133-156.