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Human Resource Management Practices and Performance of Firms Listed on the Nairobi Securities Exchange

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Most research demonstrating the link between Human Resource Management Practices (HRMP) and firm performance has focused on the private sector, yet understanding this relationship in publicly listed firms, in the Developing World setting is equally important. The role of HRMP on firm performance of the Nairobi Securities Exchange (NSE) listed firms has not been established using the selected variable, yet theory has demonstrates that HRMP can have an effect on firm performance. This study was motivated by the desire to fill this gap in knowledge. The objective of the study was to establish the relationship between HRMP and firm performance. The research design was cross sectional descriptive survey. Data was collected using a self-administered questionnaire, from a population of 60 NSE listed firms. The response rate was 60%. Simple linear regression was used to analyze the data. The results of the study show a statistically significant relationship between HRMP and performance of firms listed on the NSE. The findings of the study are consistent with the findings of other empirical studies which have established a significant link between HRMP and firm performance. It was recommended that firms have to ensure that the HRMP that they adopt assist them to attain and sustain a superior competitive advantage in their operations.

Key words: Human Resource Management Practices (HRMP); firm performance

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Introduction

There has been a considerable amount of empirical research on the relationship between Resource certain Human Management Practices (HRMP) and business performance. According to Pfeffer & Viega (1999) there are seven specific HRMP, these are; employment security, targeted selection, workplace teams and decentralization, high pay contingent on performance, organizational employee training, reduction of status differentials and information business sharing with employees, which collectively lead to higher revenue, profits, market value and even organizational survival rates. Employees play a crucial role in an organization Lawler (1994) posits that, for organizations to be sustainable in the medium to long term, employees must be motivated to care about the work they do, to acquire knowledge related skills and to perform the work to the best of their abilities. The type of HRMP that are adopted in an organization matter, (Ichniowski et al., 1997; Huselid et al., 1997; MacDuffie, 1995) have prescribed to the view that high involvement HRMP are positively associated with such business performance measures as market value, rate of return on capital employed, revenue growth, revenue per employee, capital utilization, productivity, product and service quality. Knowledge and intellectual capital, according to Wright et al., (1994) are becoming increasingly important if firms are to be successful in highly competitive global markets.

Past studies have pointed to the increasing link of HRMP and performance of firms.

HRMP-firm performance relationship has been the subject of significant empirical examination (Khatri, 2000; Arthur, 1994; Huselid, 1995a; Pffefer, 1994; Dimba & K'Obonyo, 2009). Studies indicate that those firms that adopt certain HRMP in the implementation of the human resource practices, policies and practices tend to achieve superior results compared to their competitors (K'Obonyo, Busienei, & Ogutu, 2013; Kidombo, 2007; Truss, 1999; Guest, 1987). Firms may implement and manifest elements of HRMP which impact on employee behavior, commitment and work attitudes as employee outcomes that affect firm performance (Huselid, 1995b). Some scholars have argued that more effective bundles of HRMP can transform a firm's human resources into a strategic asset, as a result of the potential for complementarities between human resource management practices and firm resources (Barney, 1995; McDuffie, 1995; Ulrich & Lake, 1990).

Firms listed on the Nairobi Securities Exchange (NSE) have encountered challenges (Capital Markets Authority, 2012a) in regard to their performance contrary to the expectations of the stakeholders who span across shareholders, employees, consumers, and government among others. These firms are expected to increase their sales growth rates, expand their market share, increase productivity and profitability, which have not been realized by some of the firms. Underpinning factors that influence firm performance may be attributed to HRMP adopted by the NSE listed firms. Hence the focus of this study that set out to shade some light on grey areas and perspectives that had hitherto not been included in previous firm performance empirical studies.

Literature Review Theoretical Foundations

This study is anchored in the Human Capital Theory (HCT) and the Resource Based View (RBV) of the firm. The Human Capital Theory according to Schultz (1961) provides a perspective that value addition by people within an organization can contribute to better firm performance. Human capital theory regards people as assets and not a cost within an organization. Human capital, according to Bontis (1998), represents the human factor in the organization; the combined intelligence, skills and expertise that gives the organization its distinct character. The HCT emphasizes the added value that people can contribute to an organization. Boxall (1996) refers to this situation as one that confers 'human capital advantage.' Human capital is an intangible asset - it is not owned by the firm that employs it. Despite the lack of formal ownership of human capital, firms can and do gain from high levels of training and knowledge of their employees through strategies like creation learning corporate cultures or vocabulary terms to create cohesion.

There is strong evidence that supports the Resource Based View (Crook et al., 2008) which indicates that firms compete in an ever changing and dynamic business environment. Organizations can attain and achieve a sustained competitive advantage through their employees according to Barney (1991). This can be realized when a firm has a human resource pool that cannot be imitated or substituted by its rivals or competitors. The RBV as a basis of competitive advantage lies primarily in the application of the bundle of valuable resources at the disposal of the firm. The firm has to identify the key potential resources which should fulfill the criteria of being valuable, rare, in-imitable and nonsubstitutable by the firms' competitors (Galbreath, 2005) in the area in which the firm operates.

The key points of the RBV theory are that firms have to identify their key potential resources and evaluate whether these resources fulfill the following criteria referred to as Valuable, Rare, In-imitable and Non-substitutable (VRIN). A resource must be valuable to enable a firm to employ а value-creating strategy, by either outperforming its competitors or reduce its own weaknesses (Barney, 1991; Amit & Schoemaker, 1993). Rare - to be of value, a resource must be rare by definition. In a perfectly competitive strategic factor market for a resource, the price of the resource will be a reflection of the expected discounted above-average returns future (Barney, 1986a). In-imitable – if a valuable resource is controlled by only one firm it could be a source of a competitive advantage (Barney, 1991). This advantage could be sustainable in the long run if competitors are not able to duplicate this strategic asset perfectly (Peteraf, 1993; Barney, 1986b,). Nonsubstitutable - even if a resource is rare, potentially value-creating and imperfectly imitable, an equally important aspect is lack of substitutability (Dierickx & Cool, 1989; Barney, 1991). Firms have to provide care for and protection of resources that possess these evaluations, because doing so can improve organizational performance (Crook, et. al, 2008).

The VRIN characteristics mentioned are individually necessary, but not sufficient conditions for a sustained competitive advantage (Dierickx & Cool, 1989; Priem & Butler, 2001). Within the framework of the resource-based view it should be noted that, the chain is as strong as its weakest link and therefore requires the resource to display each of the four characteristics to be a possible source of a sustainable competitive advantage (Barney, 1991). There has to be a distinction between capabilities and resources by defining capabilities as a special type of resource, specifically an organizationally embedded non-transferable firm-specific resource whose purpose is to improve the productivity of the other resources possessed by the firm (Barney, 1991). Resources are stocks of available factors that are owned or controlled by the firm, and capabilities are an organization's capacity to deploy resources. Essentially, it is the bundling of the resources that builds capabilities.

Human Resource Management Practices

Human Resource Management Practices are the approaches that are used in managing people (Armstrong, 2012). An organization can adopt a set of HRMP that suit its operational requirements. According to Pfeffer (1998) there are seven HRMP that influence firm performance. These HRMP employment security, are: targeted workplace selection. teams and decentralization, high pay contingent on

organizational performance, employee training, reduction of status differentials and business information sharing with employees. Faced with intensive and complex competitive pressure, firms closely examine their organizational structures, especially how they organize employment. This change of focus to the human side of business necessitated the has the implementation of continuous improvement HR programs (Esther, Elegwa, & James, 2012; Longenecker et al., 1998). Firms have moved towards Strategic Human Resource Management (SHRM) for adopting tactical patterns or choices that are associated with the management of employment relations. This explains a firm's ability to manage human resources more effectively for better outcomes (Boxall & Purcell, 2003).

Globally competitive organizations depend on the uniqueness of their human resources and the systems for managing human resources effectively to gain a competitive advantage (Pfeffer, 1994; Barney & Wright, 1998). Human resources are not only the drivers and principal value creators of the output of the knowledge industry, but they are also the intellectual capital or the infrastructure investment. Therefore, attracting, training, retaining and motivating employees the are critical success determinants for any knowledge-based organization. A firm that aspires to perform well has to ensure that its HRM practices are and consistent with synergistic its organizational strategy (Nzuve, 2007), like its competitive strategy in order to spur both individual and organizational performance (Schuler & Jackson, 1987).

There has been much research that attempts to establish a positive link between HRM practices and firm performance. According to Ulrich (1997) HR practices seem to matter and survey findings confirm it, though direct relationships between investments and attention to HR practices are often fuzzy, and tend to vary according to the population sampled and the measures used. Other scholars like (Purcell et al., 2003) have cast doubts on the validity of some of the attempts through research to make the connection. In the current study, employment security, selective hiring, selfmanaged teams, performance related pay, workforce training, status differentials and sharing information were used as indicators of human resource management practices. According to Ahmad and Schroeder (2003) sophisticated technologies and innovative manufacturing practices alone can do very little to enhance operational performance unless there are requisite human resource management practices that can be used to form a consistent socio-technical system in a workplace.

Firm Performance

Firm performance can be measured in various ways. These may include but not limited to sales growth rate, market share, productivity and profitability (Ichniowski et al., 1997). Sales growth rate is a ratio that measures the rate of change in sales from time to time or a specified period of time. The utilization of historical growth rates is one of the methods of estimating future growth. Market share is the percentage of a market, which may be defined in terms of either units or revenue, accounted for by a specific entity. Market share is a key indicator of market competitiveness, that is, how well a firm is doing against its competitors.

Productivity is a measure of organizational competence and can be viewed as a measure of the efficiency and effectiveness (Huselid, 1995b) with which resources are used to produce the output of goods and services of the quality needed by consumers and society in the long run. Labour productivity is one of the partial measures of productivity, with the others being materials, energy or capital productivity. Profitability is measured with income and expenses, income is money generated from the activities of the business. Increasing profitability is one of the most important tasks of business managers because a profitable business has the ability to survive and reward its owners.

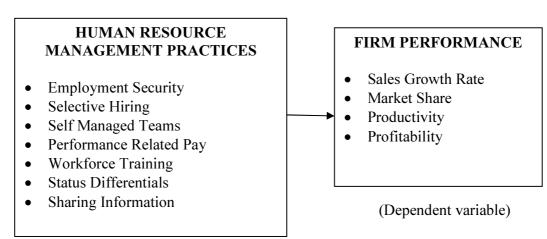
Firms Listed on the Nairobi Securities Exchange

The firms that are listed on the Nairobi Securities Exchange play a major role in promoting a culture of thrift or saving in the (Capital Markets economy Authority, 2012a). The firms are expected to maintain high standards of accounting, resource management and transparency in the management of business. They are also expected to adhere to strict guidelines in all their dealings and operations as they compete in a dynamic business environment that affects their performance while meeting and exceeding the expectations of their stakeholders. This includes but is not limited to the payment of dividends, expansion of their sales volume, enhancement of their market share, higher levels of productivity and profitability.

The Government of Kenya aims to achieve and sustain an annual economic growth rate of 10% for it to realize the Kenya Vision 2030 (Government of Kenya, 2007). This has made the government to strengthen the NSE so that it can enhance its role as a robust securities market. The NSE on its part expects the listed firms to enhance their efficiency and competitiveness (Capital Markets Authority, 2012a). The listed firms have to formulate and implement sound practices, including HRMP that would make them to not only attract, but retain, motivate, sustain and make optimum use of a workforce that can make the firms build a sound human resource base. It should be noted that the firms listed on the NSE compete for the same customers, more so for those listed in the same categories.

Conceptual Framework

The conceptual model Figure 1 presents a schematic picture of the researchers' presumed perceptions of existing relationship among the various variables of the study. The schematic diagram captures the linkage in the literature. The model relationship between suggests Human resource management practices as independent variable and firm performance as a dependent variable.



(Independent variable)

Figure 1: Conceptual Model showing the relationship between Human Resource Management Practices and Firm Performance

As shown in Figure 1 human resource management practices have influence on firm performance. However, different organizations tend to have different HRMP like the mode of employee recruitment and selection, employees training and development and compensation management which in turn tend to have different implications on firm performance. The relationship between HRMP and firm performance was under study to shade light on the aspects that underpin the HRMP – firm performance link.

Hypothesis

There is a relationship between human resource management practices and firm performance.

Methodology

The research design adopted for this study was a cross-sectional descriptive survey of all firms listed on the Nairobi Securities Exchange. The descriptive design was the most appropriate for the study because it allowed the researcher to describe HRMP adopted by firms, and make specific predictions on how much change was caused by the predictor variable and whether the effect was significant. This was achieved through simple linear regression analysis. Cross-sectional design was preferred because the data was collected at one point in time across all the 60 NSE listed firms. Each respondent (human resource manager equivalent employee) or filled one questionnaire, once during the entire data collection period.

Instrument validation was achieved in several ways. A pre-test was done by administering the instrument to sixteen conveniently selected human resource managers to fill. The sixteen human resource managers were requested to evaluate the statement items for relevance, meaning and clarity. On the basis of their response, the instrument was adjusted appropriately. Content validity involved the examination of content to determine whether it covered a representative sample of the measurement items. Validity can be assessed using expert opinion and informed judgment (Kerlinger, 2002).

Cronbach Alpha was calculated to test for reliability. The Cronbach's Alpha coefficient was used to measure the internal consistency of the measurement scales. This is a scale measurement tool, which is commonly used in social sciences to establish the internal consistency of items or factors within and among variables of study. Nunnally (1967) argues that an alpha coefficient of .700 or above is an acceptable measure. The Cronbach Alpha coefficients for HRMP and firm performance in the conceptual framework were reliable registering scores of 0.891 and 0.835 respectively. This indicates that the data collected using the data collection instrument was reliable for analysis. The tests were conducted using SPSS.

Simple linear regression analysis was used to establish the nature and magnitude of the relationship between variables and to test hypothesized relationship. Mean scores were computed for likert type questions. The value of coefficient of determination R^2 shows the degree or amount of variation in the dependent variable attributed to the predictor variable. The Beta values show the amount of change in the dependent variable attributable to the amount of change in the predictor variable, and the F ratio measures the model fit, or simply put a measure of how well the equation line developed fits with observed data. The statistical significance of the hypothesized relationship was interpreted based on R^2 , F, t, β and p

values. The simple linear regression model used is presented below:

Simple Linear Regression Model

 $\mathbf{Y} = \boldsymbol{\beta}_0 + \boldsymbol{\beta}_I \mathbf{X}_1 + \boldsymbol{\varepsilon}$

Where,

Y= Firm performance (Dependent Variable), measured by a composite index derived from scores on sales growth rate, market share, productivity and profitability

 $\beta_0 =$ Intercept

 β_I = Beta coefficient (slope or change) in Y, given 1 unit change in X₁

 X_1 = Human Resource Management Practices (Independent Variable), measured by a composite index derived from scores on employment security, selective hiring, self managed teams, performance related pay, workforce training, status differentials and sharing information

 $\varepsilon = \text{Error term}$

RESULTS

The objective of the study was to establish the relationship between HRMP and firm performance. Based on this objective data was collected using twenty two HRMP items measuring the human resource management practices, and four items measuring firm performance. The items in the HRMP scale consisted of statements that measured the extent to which organizations use the human resource management practices in the seven broad areas that comprise the HRM practices.

The respondents rated the extent to which itemized HRM practices were used in their organizations, on a scale of 1 to 5, where 1 represented 'Strongly Disagree' and 5 represented 'Strongly Agree.' Similarly, the items measuring firm performance consisted of statements that represented the extent to which they applied to the firm, on a scale of 1 to 5, where 1 represented 'Very Low' and 5 represented 'Very High.'

The hypothesis focused on establishing the nature of the relationship between HRMP and firm performance. The hypothesis was tested using simple linear regression analysis. The results are presented in Table 1.

Model Summary										
Model			R	R Square	Adjusted R Square	Std. Error of the Estimate				
1	HRMP		.346	.120	.094	.74236				
ANOVA ^b										
Model		Sum of Squares		Df	Mean Square	F	Sig.			
1	Regression	2.547	2.547		2.547	4.622* .039	.039			
	Residual	18.737		34	.551					
	Total	21.285		35						
Coeffic	ients ^a	•								
Model		Unstandardized Coefficients			Standardized					
					Coefficients	Т	Sig.			
				Std.						
		В		Error	Beta					
1	(Constant)	1.284		1.199		1.071	.292			
	HRMP	.688		.320	.346	2.150*	.039			

Table 1: Regression Results	for the F	Effect of H	luman Resource	Management Practices
on Firm Performance				

p < 0.05

a. Predictors: (Constant), Human Resource Management Practices

b. Dependent Variable: Firm Performance

The regression results presented in Table 1 show that the relationship between HRMP and firm performance was significant (R Square = 0.12, F = 4.622, at p < 0.05) with 12% of the variation in firm performance being explained by variations in HRMP. The F ratio shows that the regression of HRMP on firm performance was significant at p < 0.05, which was evidence of the goodness of fit of the regression model. However, the model did not explain 88 percent of the variations in performance, implying that there were other factors associated with firm performance, which were not explained in the model.

The beta was equally significant (β =.346, t = 2.15, at p < 0.05). The beta value implies that for one unit increase in the use of HRM practices, firm performance increased by 0.346 or 35%. From the regression results it is evident that the hypothesis that there is a relationship between HRMP and firm performance was supported.

Discussion

The study found out that there was a positive and significant relationship between HRMP and performance of the NSE listed firms. As shown in Table 1, for every one unit increase in the use of HRMP, firm performance increases by .346 or 35%. In a previous study in the

USA, Arthur (1994) found that commitment to HRM practices were associated with higher productivity, lower scrap level rates and lower employee turnover rates. These findings corroborate findings in earlier studies done in Kenya and in the western countries.

In a previous study conducted in the private sector in Kenya, Kidombo (2007) found that soft HR strategic orientation contributed 38 percent of the change in performance. In а study of the manufacturing sector in the US, Youndt et al., (1996) found that capital enhancing increased HR systems operational performance (employee productivity, machine efficiency and customer satisfaction). Gould-Williams (2003)equally found a significant predictive effect of systems of HRM practices on performance of public organizations in UK. Pfeffer & Viega (1999) also found that human resource practices collectively lead to higher firm performance.

These results imply that HRM practices that are directed at enhancing employment practices such as long-term employment relations, performance contingent rewards, supportive and pleasant work environment, investment in employee training and development programmes enhance firm performance.

This research presents some insights in the area of managing the employment relationship, with special emphasis on the Kenyan situation and its contextual needs as a developing country. From human capital theory, it can be argued that people possess skills, knowledge and abilities that provide economic value to firms. The higher the potential for employee contribution in a firm, the more likely it is that the firm will invest in human capital through appropriate human resource management activities and these investments will in turn lead to higher individual productivity and superior firm performance. Therefore, human capital theory maintains that human capital and how it is harnessed is an essential factor in the link between human resource management practices and firm performance link. The results of the current study are thus consistent with the RBV theory developed by Barney (1991).

Conclusion

Previous empirical studies have indicated that there is an increasing link of between HRMP and performance of firms. HRMPfirm performance relationship has been the subject of significant empirical examination. Studies indicate that those firms that adopt certain HRMP in the implementation of the human resource practices, policies and practices tend to achieve superior results compared to their competitors. Firms may implement elements of HRMP which impact on employee behavior, commitment and competence as employee outcomes that affect firm performance.

This study empirically indicated that HRMP that are adopted in an organization influence firm performance. The findings of the study revealed a positive and statistically significant influence of HRMP on firm performance. It can be concluded that there is a positive relationship between HRMP and firm performance.

Implications for Theory and Practice

It is recommended that firms emphasize appropriate human resource management practices that best fit the requirements of their organizations; this can contribute firm positively to performance. Specifically, the following human resource management practices should be emphasized: employment security practices, selective hiring practices, selfmanaged teams, performance related pay, workforce training, status differentials and sharing information. The mix of practices that should be adopted by a given firm should be generic to the situation obtaining in the entity.

References

- Ahmad, S. and Schroeder, R. G. (2003). The impact of human resource management practices on operational performance: Recognizing country and industry differences. *Journal of Operations Management*, 21, 19-43.
- Amit, R. and Schoemaker, P.J.H. (1993). Strategic assets and organizational rent. Strategic Management Journal, 14(1): 33-46.
- Arthur, J. B. (1994). Effects of human resource systems on manufacturing performance and turnover, Academy of Management Journal, 37, 670-687
- Armstrong, M. (2012). A handbook of human resource management practice, Kogan Page
- Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17, 99-120.
- Barney, J.B. (1986a). Strategic factor markets: Expectations, luck and business strategy. Management Science; 32, (10): 1231–1241.
- Barney, J.B. (1986b). Organizational culture: can it be a source of sustained competitive advantage? Academy of Management Review; 11, (3): 656–665.
- Barney, J. B. (1995). Looking inside for competitive advantage. The Academy of Management Executive, 9, (4): 49-61.
- Barney, J. B. and Wright, P, M (1998). "On becoming a strategic partner: The role of human resources in gaining competitive

advantage," *Human Resource Management*, 37, (1): 31-46.

- Bontis, N. (1998). Intellectual Capital: "An Exploratory Study that Develops Measures And Models," Management Decisions, 36(2); 63-76.
- Boxall, P. and Purcell, J. (2003). Strategic Human Resource Management. Palgrave Macmillan. Basingstoke.
- Boxall, P. (1996). The strategic HRM debate and the resource – based view of the firm, Human Resource Journal, 6(3): 59-75
- Capital Markets Authority, (2012a). How does the stock market work, 6:14 pm 10/10/2012, http://www.cma.or.ke
- Crook, T. R., Ketchen Jr., D. J., Combs, J. G., and Todd, S. Y. (2008). Strategic resources and performance: A meta-analysis. Strategic Management Journal; 29, 1141–1154.
- Dierickx, I. and Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. Management Science; 35 (12): 1504–1511.
- Dimba, B. and K'Obonyo, P.O. (2009). The effect of strategic human resource management practices on performance of manufacturing multinational companies in Kenya: A moderating role of employee cultural orientations. Proceedings of the 10th, Annual Conference, IAABD
- Esther, W., Elegwa. M and James. K. (2012). Relationship between strategic human resource management and firm performance of Kenya's corporate organizations. International Journal of Humanities and Social Science, 2(10) (Special Issue May 2012).
- Galbreath, J. (2005). "Which resources matter most for firm success? An exploratory study of resource based view." Technovation 25, 979-987.
- Gould-Williams, J. (2003). The importance of HR practices and workplace trust in achieving superior performance: A study of public sector organizations. International Journal of Human Resource Management, 14, 28-54.

- Government of Kenya (GoK). (2007). The Kenya Vision 2030, Ministry of Planning and National Development, and the National Economic Social Council: Office of the President. Nairobi. Kenya.
- Guest, D. (1997). Human resource management and performance: A Review and research agenda. International Journal of Human Resource Management, 8(3): 263-276.
- http://www.nse.co.ke ., Listed firms, Nairobi Securities Exchange, 3:37 pm 10/10/2012.
- Huselid, M. A. (1995a). The impact of human resource management: An agenda for the 1990's, The International Journal of Human Resource Management, 1(1): 17-43.
- Huselid, M. (1995b). The impact of human resource management practices on turnover, productivity, and corporate financiall performance. Academy of Management Journal, 938(3): 635-672.
- Huselid. M. A, Jackson, S E, and Schuler, R S (1997). Technical and strategic human resource management effectiveness as determinants of firm performance, Academy of Management Journal, 40(1): 171-88.
- Ichniowski, C., Shaw, K. and Prennushi. G. (1997). The effects of human resource management practices on productivity: A study of steel finishing line. The American Economic Review, June.
- Kerlinger F. N. (2002). Foundations of Behavioural Research: Holt, Rinehart and Winston, Inc. USA.
- Khatri, N. (2000). Managing human resource for competitive advantage: A study of companies in Singapore. International Journal of Human Resource Management, 11: April 2000: 336-365.
- Kidombo, H. J. (2007). Human Resource Strategic Orientation, Organizational Commitment and Firm Performance in Large Private Manufacturing Firms in Kenya (Unpublished PhD Thesis) University of Nairobi
- K'Obonyo, P. Busienei, R. and Ogutu, J. (2013). The effect of human resource strategic orientation on performance of large manufacturing firms in Kenya: Prime

Journal of Business Administration and Management, 3, Issue 1, 822-833 (2013).

- Lawler, E. (1994). Total quality management and employee involvement: Are they compatible? Academy of Management Executives:.8, 68-76.
- Longenecker, C.O., Dwyer, D. J. and Stansfield, T. C. (March/April, 1998). Barriers and gateways. Industrial Management 21-28.
- MacDuffie, P. (1995). Human resource bundles and manufacturing performance: organizational logic and flexible production systems in the world auto industry. Industrial Labour Review, 48: 197-221.
- Nunnally, J. (1967). Psychometric theory. New York. McGraw Hill
- Nzuve, S. N, (2007). Elements of organizational behavior Nairobi: Nairobi University Press.
- Pfeffer, J. (1994). Competitive advantage through people: Unleashing the power of the work force. Boston: Harvard Business School Press.
- Pfeffer, J. (1998). Seven practices of successful organizations: California Management Review. 40(2): 97-124.
- Pfeffer, J., and Viega, J.F. (1999). Putting people first for organizational success: Academy of Management Executive: 13(2).
- Priem, R.L., Butler, J.E. (2001), Is the resourcebased theory a useful perspective for strategic management research? Academy of Management Review; 26(1): 22–40.
- Purcell, J., Kinnie, K., Hutchinson, R., B and Swart, J. (2003). People and performance: How people management impacts on organizational performance. London Chartered Institute of Personnel Development.
- Rodriquez, J. M., and Ventura, J. (2003). Human resource management systems and organizational performance: An analysis of Spanish manufacturing industry. International Journal of HRM, 14, 1206-1226
- Schuler, R. S. and Jackson, S. E. (1987). Linking competitive strategies and human resource

management practices, Academy of Management Executive, 1(3): 207-219.

- Schultz, T, W. (1961). Investing in human capital. American Economic Review, 51, March, 1-17.
- Truss, C., Gratton, L., Hope, V., McGoven, P. and Stiles, P. (1997). Soft and hard models of human resource management: A reappraisal. International Journal of HRM, 9(4): 6523-670.
- Ulrich, D. (1997). Human Resource Champions. Boston: Harvard Business School Press.
- Ulrich, D & Lake, D (1990). Organizational capability: Competing from the inside out, New York, Wiley.
- Wright, P. M., McMahan, G. C., and McWilliams, A. (1994). Human resources and sustained competitive advantage: A resource based perspective. International Journal of Human Resource Management
- Youndt M. A., Snell, S. A., Dean, J. W., Jr., and Lepak, D. P (1996). Human resource management, manufacturing strategy and firm performance. Academy of Management Journal. 39(4): 836-866.