

Mediation Effect of Employee Outcomes in the Relationship between Human Resource Management Practices and Performance of Firms Listed on the Nairobi Securities Exchange

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Abstract

Much of the research demonstrating the link between Human Resource Management Practices (HRMP) and firm performance has focused on the moderating roles of variables. The mediating role of employee outcomes in the relationship between HRMP and firm performance relationship has not been established using Nairobi Securities Exchange (NSE) listed firms, yet theory and empirical studies have demonstrated that employee outcomes mediate in the HRMP-firm performance relationship. This study was motivated by the desire to fill this gap in knowledge. The objective of the study was to determine whether the effect of HRMP on firm performance is mediated by employee outcomes. 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%. Descriptive statistics, correlation and regression techniques were used to analyze the data. The results of the study show a statistically significant relationship between HRMP and firm performance. The Baron and Kenny approach was used to test for mediation. The results show that the relationship between HRMP and firm performance is not mediated by employee outcomes. The finding that employee outcomes do not mediate in the relationship between HRMP and firm performance was surprising. It was also contrary to expectation and even contrary to previous studies. The study contributes to our understanding of the effect of employee outcomes in the HRMP- firm performance link of NSE listed firms. It was recommended that firms have to ensure that they align employee outcomes with HRMP that can enable them to attain and sustain a superior competitive advantage in their markets.

Keywords: human resource management practices (HRMP); employee outcomes; firm performance

INTRODUCTION

Human Resource Management Practices (HRMP) adopted by firms to some extent influence organizational performance. According to Pfeffer and Viegga (1999) there are specific HRMP, which collectively lead to higher revenue, profits, market value and even organizational survival rates. Employees play a crucial role in an organization Lawler (1994) observes that, for organizations to be sustainable in the medium to long term, employees must be motivated to care about the work they perform, 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 perspective 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.

HRMP-firm performance relationship has been the subject of significant empirical examination (Khatri, 2000; Arthur, 1994; Huselid, 1995a; Pfeffer, 1994; Dimba and K'Obonyo, 2009). The Studies indicate that those firms that adopt certain HRMP in the implementation of the human resource practices, policies and practices tend to achieve and sustain superior results compared to their competitors (K'Obonyo, Busienei, and Ogutu, 2013; Kidombo, 2007; Truss, 1999; Guest, 1997). Firms may implement

HRMP that impact on employee behavior, commitment and work attitudes as employee outcomes that affect firm performance (Huselid, 1995b). Some scholars have argued that effective bundles of HRMP can transform a firm's Human Resources (HR) into a strategic asset, as a result of complementarities between human resource management practices and firm resources (Barney, 1995; McDuffie, 1995; Ulrich and Lake, 1990). Underpinning factors that influence firm performance may be attributed to HRMP adopted by the Nairobi Securities Exchange (NSE) listed firms and the mediation effect of employee outcomes. Hence the focus of this study that set out to shade some light on the grey area and perspective of employee outcomes mediation in the HRMP – firm performance link that had hitherto not been included in previous HRMP-firm performance empirical studies conducted on NSE listed firms.

Human Resource Management Practices

Organizations can adopt a set of HRMP that suit their operational requirements. According to Pfeffer (1998) there are seven HRMP that influence firm performance; employment security, rigorous recruitment and selection, workplace 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 has necessitated the implementation of continuous improvement HR programs (Esther, Elegwa, and James, 2012; Longenecker et al., 1998). This enhances a firm's ability to manage human resources more effectively for better outcomes (Boxall and Purcell, 2003).

Organizations that are globally competitive depend on the uniqueness of their HR and systems for managing HR to gain competitive advantage (Pfeffer, 1994; Barney and Wright, 1998). Human resources are the drivers and principal value creators of the output of the knowledge industry, and also the intellectual capital or the infrastructure investment. A firm that aspires to perform well should ensure that its HRM practices are synergistic and consistent with its organizational strategy in order to spur both individual and organizational performance (Schuler and Jackson, 1987; Ulrich, 1997).

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 HRMP practices that can be used to form a

consistent socio-technical system in a workplace. It has been realized by firms that the human resource function, policies and practices are crucial for the realization of organizational goals.

Firm Performance

Firm performance can be measured in through, 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. Market share is the percentage of a market, which may be defined in terms of either units or revenue. Productivity is a measure of organizational competence and can be viewed as a measure of the efficiency and effectiveness with which resources are used to produce the output. Labour productivity is a measure of productivity. Profitability is measured with income and expenses. 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.

Employee Outcomes

Employee outcomes are immediate behaviours and work attitudes like competence, employee commitment and empowerment result from the management policies and practices of a given firm. Employee outcomes have an effect on employees' work in an organization. Employees do not bring these key work attitudes and behaviors on entry into a firm. They acquire them in the workplace, through a process of interaction relationships. Appropriate HRMP, policies, processes and procedures enhance employee outcomes (Luthans, 2008).

The relationship between HRMP and firm performance is influenced by variables like employee outcomes. (Boxall and Purcell, 2003) argue that there is a complex relationship between HRM and the achievement of organizational outcomes and that HR strategy is strongly influenced by national, sector and organizational factors. Employee outcomes like the competence, commitment and empowerment of employees to some extent affect firm performance. Many organizations are improving their productivity and competitive advantage through their people (Delery and Doty, 1996; Purcell et al., 2003), especially when it is considered that people management is an underpinning and essential aspect to the competitiveness of business organization.

Firms Listed on the Nairobi Securities Exchange

The NSE listed firms play a major role in promoting a culture of thrift or saving in the economy. The firms are expected to maintain high standards of accounting,

resource management and transparency in the management of their businesses. They are also expected to adhere to strict guidelines in all their dealings and operations in dynamic business environments that affect 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 aspires to achieve and sustain an annual economic growth rate of 10 per cent as part of the efforts for the realization of the Kenya Vision 2030 (GOK 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. 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.

Conceptual Framework

The conceptual model Figure 1 presents a schematic diagram of the researchers’ presumed perception of existing relationship among the variables of the study based on the literature. The model suggests a mediating effect of employee outcomes in the relationship between Human resource management practices and firm performance.

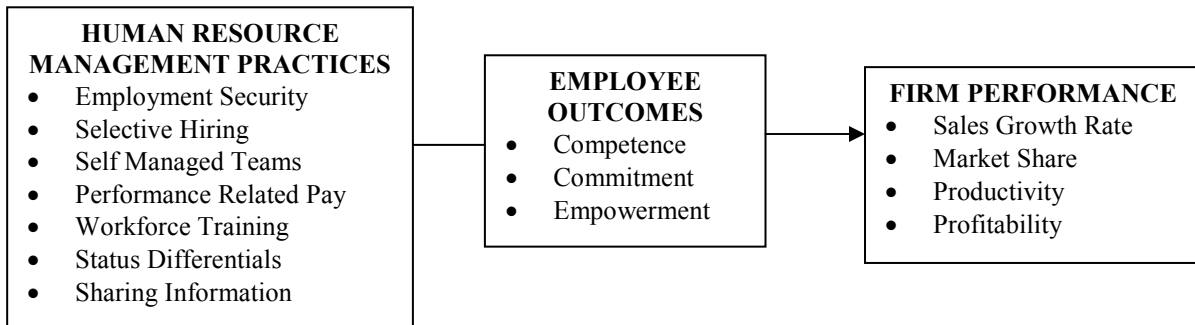


Figure 1: Conceptual Model showing the Mediating effect of the relationship between Human Resource Management Practices and Firm Performance

Hypothesis

The effect of human resource management practices on firm performance is mediated by employee outcomes.

MATERIALS AND METHODS

The research design adopted for this study was a cross-sectional descriptive survey of all firms listed on the NSE. The descriptive design was the most appropriate for the study because it allowed the researchers to describe HRMP adopted by firms, and make specific predictions on how much change was caused by predictor variable and whether the effect was significant. This was achieved through stepwise 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 filled one questionnaire, once during the entire data collection period.

Instrument validation was achieved through a pre-test by administering the instrument to sixteen conveniently selected human resource managers to fill. The HR 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, which can be assessed using expert opinion and informed judgment (Muganda, 2010; Kerlinger, 2002).

Cronbach Alpha was calculated to test for reliability. The Cronbach’s Alpha coefficient was used to measure the internal consistency of 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, employee outcomes and firm performance in the conceptual framework were reliable registering scores of 0.891, 0.765 and 0.835 respectively. This indicated that the data collected using the data collection instrument was reliable for analysis. The tests were conducted using SPSS.

Stepwise multiple regression analysis was used to establish the nature and magnitude of the relationship between the 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 it is 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 multiple regression model used was: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$ where, Y= Firm performance (Dependent Variable), measured by a composite index derived from scores on scales growth rate, market share, productivity and profitability; β_0 = Intercept; β_1 and β_2 = Beta coefficient (slope or change) in Y, given 1 unit change in X_1 and X_2 respectively; X_1 = HRMP (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; X_2

= Employee outcomes (mediating variable), measured by a composite index derived from scores on competence, commitment and empowerment; and ϵ = Error term.

RESULTS

The objective of the study was to establish whether the influence of HRMP on firm performance is mediated by employee outcomes. The Baron and Kenny approach in testing for mediation was employed for the purpose of this study. For mediation effect to be considered positive, four conditions should be fulfilled, (1) The independent variable is significantly related to the dependent variable in the absence of the mediating variable, (2) The independent variable is significantly related to the mediator variable, (3) The mediator variable is significantly related to the dependent variable and (4) When controlling for the effect of the mediating variable on the dependent variable, the effect of the independent variable on the dependent variable is insignificant in the presence of the mediating variable.

Table 1: Mediating Effect of Employee Outcomes on the Relationship between HRMP and Firm Performance (First Step)

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	1	2.547	4.622*	.039
	Residual	18.737	34	.551		
	Total	21.285	35			
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.284	1.199		1.071	.292
	HRMP	.688	.320	.346	2.150*	.039

*p < 0.05 a. Predictors: (Constant), Human Resource Management Practices b. Dependent Variable: Firm Performance

The results in Table 1 show that the influence of HRMP on firm performance was significant with 12% of the variation in firm performance being significantly explained by the variation 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. The beta was also significant. The first mediation condition which states that the independent variable should be significantly related to the dependent variable in the absence of the mediating variable was thus satisfied.

The second step as presented in Table 2 indicates that the influence of HRMP on employee outcomes was significant, with 43% of the variation in employee outcomes being explained by variation in HRMP. The F ratio shows that the regression of HRMP on employee outcomes was significant at p < 0.001, which is evidence of the goodness of fit of the regression model. The beta was also significant, thus satisfying the second condition which states that the independent variable should be significantly related to the mediator variable

Table 2: Mediating Effect of Employee Outcomes on HRMP and Firm Performance (Second Step)

Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	HRMP	.656	.431	.414	.33338	
ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.858	1	2.858	25.712*	.000
	Residual	3.779	34	.111		
	Total	6.636	35			
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.216	.538		2.259	.030
	HRMP	.729	.144	.656	5.071*	.000

*p < 0.001 a. Predictors: (Constant), Human Resource Management Practices b. Dependent Variable: Employee Outcomes

Table 3: Mediating Effect of Employee Outcomes on HRMP and Firm Performance (Third and Fourth Steps)

Model Summary											
Model		R	R Square	Adjusted R Square	Std. Error of the Est.	Change Statistics					
						R Square Change	F Change	df1	df2	Sig.	
1	EO	.254	.064	.037	.76528	.064	2.344	1	34	.135	
2	HRMP*EO	.348	.121	.068	.75298	.121	2.270	2	33	.119	
ANOVA ^b											
Model		Sum of Squares	Df	Mean Square	F	Sig.					
1	Regression	1.373	1	1.373	2.344	.135					
	Residual	19.912	34	.586							
	Total	21.285	35								
2	Regression	2.575	2	1.287	2.270	.119					
	Residual	18.710	33	.567							
	Total	21.285	35								
Coefficients ^a											
Model		Unstandardized Coefficients			Standardized Coefficients	T	Sig.				
		B	Std. Error	Beta							
1	(Constant)	2.060	1.175		1.754	.089					
	Employee Outcomes	.455	.297	.254	1.531	.135					
2	(Constant)	1.181	1.304		.906	.371					
	HRMP	.626	.430	.315	1.456	.155					
	Employee Outcomes	.085	.387	.047	.219	.828					

- a. Predictors: (Constant), Employee Outcomes (EO)
- b. Predictors: (Constant), Human Resource Management and Employee Outcomes
 Dependent Variable: Firm Performance
 Model 1: Represents regression model with only the independent variable
 Model 2: with Mediator Reflects regression model with both independent and mediating variable (HRMP*Employee Outcomes)

The third and fourth steps as presented in Table 3 were combined during the test. In the third step the influence of employee outcomes on firm performance was not significant. The F ratio implies that the regression of employee outcomes on firm performance was insignificant. The β was not significant, thus not satisfying the third condition which states that the mediator variable should be significantly related to the dependent variable. In the fourth step, the influence of

the independent variable (HRMP) on the dependent variable (firm performance) was insignificant in the presence of the mediating variable, employee outcomes. The F ratio shows that the regression of HRMP and employee outcomes on firm performance was insignificant. The beta was also statistically insignificant, and thus satisfied the fourth condition which states that the effect of the independent variable on the dependent variable should be insignificant in the presence of the mediating variable.

The mediation test thus did not satisfy all the four conditions that should be met for a mediation relationship to be considered and therefore it can be concluded that employee outcomes do not mediate the influence of HRMP on firm performance. The hypothesis that the effect of HRMP on firm performance is mediated by employee outcomes was not supported.

DISCUSSION

The objective of the study was to establish whether the influence of HRMP on firm performance is mediated by employee outcomes. From this objective, it was hypothesized that the effect of HRMP on firm performance is mediated by employee outcomes. The Baron and Kenny approach in testing for mediation was employed for the purpose of this test. The test as indicated in the findings did not satisfy all the four conditions that were to be met for a mediation relationship to be considered and therefore it was concluded that employee outcomes do not mediate the influence of HRMP on firm performance. The hypothesis that the influence of HRMP on firm performance is mediated by employee outcomes was therefore not supported.

From the Resource Based View, value addition by people within an organization can contribute to better firm performance Barney (1991). Human Capital Theory regards people as assets within an organization. Human capital according to Bontis et al (1998) represents the human factor in the organization; the combined intelligence, skills and expertise that gives the organization its distinct character. Human capital theory emphasizes the added value that people can contribute to an organization. According to Pfeffer (1994) a firm that aspires to succeed in the current globalized business environment must make appropriate investment to acquire and build employees who possess better skills and capabilities than their competitors. Better skills, knowledge and capabilities can be enhanced or supported by appropriate HRMP.

The findings of the current study are not in line with previous studies. This may be attributed to the type of employee outcomes that are nurtured by the NSE listed firms, which may not influence the relationship between HRMP and firm performance. Employees in the surveyed firms may be less commitment or not empowered to undertake their work. The findings of this study are not also not consistent with the resource based view (Barney, 1995), which advances a perspective that organizations need to focus on their internal resources like human resource to acquire a competitive advantage in their areas of operation. This may be attributed to

lack of consistent efforts by the NSE listed firms towards enhanced of employee outcomes.

CONCLUSION

In view of the findings the study established that there was empirical evidence that employee outcomes do not support the hypothesis that employee outcomes mediate the relationship between HRMP and firm performance. The study concludes that employee outcomes do not mediate the relationship between HRMP and firm performance.

STUDY LIMITATIONS AND SUGGESTIONS FOR FURTHER STUDY

The study adopted a survey questionnaire that was self administered and self reported and relied on the integrity of the respondents' integrity. The respondents presented their perceptions which were subjective by the nature of the data collection tools. The researchers suggest that future studies can explore the possibility of using actual quantitative performance data to obtain a different perspective to enhance our understanding of the mediation effect of employee outcomes on the relationship between HRMP and firm performance.

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.
- Arthur, J. B. (1994). Effects of human resource systems on manufacturing performance and turnover, *Academy of Management Journal*, 37, 670-687
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99-120.
- 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.
- Delery, J. E. and Doty, D.H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configuration performance preconditions. *Academy of Management Journal*, 39, 802-835.
- 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).
- Government of Kenya (GoK). (2007). *The Kenya Vision 2030*, Ministry of Planning and National Development, and the NSECI: Office of the President. Nairobi. Kenya.
- Guest, D. (1997). Human resource management and performance: a review and research agenda, *The International Journal of Human Resource Management*, 8: 3: 263-275
- 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 financial 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 Prensushi. 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.
- Luthans, F. (2008). *Organizational behavior*. 11th Edition. New York: McGraw-Hill Inc.
- 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.
- Muganda, N. (2010). *Applied business and management research. Exploring the principles and practices of research within the context of Africa*. Africa Nicorp Publication.
- Nunnally, J. (1967). *Psychometric theory*. New York. McGraw Hill
- 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).

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.

Schuler, R. S. and Jackson, S. E. (1987). Linking competitive strategies and human resource management practices, *Academy of Management Executive*, 1(3): 207-219

Truss, C. (1999). Complexities and controversies in linking HRM with organizational outcomes. *Journal of Management Studies*, 38(8): 1120-49.

Ulrich, D. (1997). Human Resource Champions. Boston: Harvard Business School Press.

Ulrich, D and 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*